**Assessing the Incremental Validity of Personality
on Direct Leadership in the Canadian Forces**

by

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A Thesis

Submitted to the Faculty of Graduate Studies and Research

In Partial Fulfillment of

the Requirements for the Degree of

Doctor of Philosophy

Department of Psychology

Carleton University

Ottawa, Ontario

December, 2006

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ISBN: 978-0-494-27097-4

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ISBN: 978-0-494-27097-4

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ABSTRACT

The Big Five personality factors have received wide acceptance over the past 20 years as the dominant organizing taxonomy for personality traits. With this acknowledgment has come a resurgence in trait research, especially at it relates to the world of work. This thesis examined the degree to which Big Five personality factors increment the prediction of leadership behaviours in a predictive validity.

This thesis defined specificity on both sides of the prediction equation. The participants were students on Canadian Forces (CF) leadership training courses and their practical leadership performance test on these courses was the criteria. The assessment situation was a maximal performance paradigm. Overall performance was assessed, as was the participant's task and contextual performance in accordance with Borman and Motowidlo's (1993) conceptualization of work behaviour. The predictors included two self-report Big Five measures that assessed personality traits at both the factor level and, in one case, at the subordinate facet level. To avoid capitalizing on chance, not all of the individual facets were used in analyses. Instead, through a variety of procedures, five sets of facets were chosen to represent their parent factors. Additional predictors included general cognitive ability, including sub-tests of the overall cognitive ability measure, and bio-data such as education level, gender, and language.

There were two primary groups of participants; junior officers undergoing initial leadership training as part of officer basic training ($n = 200$), and non-commissioned members with many years of CF experience undergoing leadership training to prepare them for appointment to junior leadership positions ($n = 118$). The two groups were also

combined into one larger group for analysis. Data on a third group, applicants to the CF, were used for norming purposes.

The primary result was that personality did indeed increment the prediction of performance over general cognitive ability. Moreover, in all cases, it was the lower level personality facets that accounted for more of the variance in performance than their parent factors. An unexpected finding was that conscientiousness showed a negative relationship with performance. This unique result is discussed in terms of the impact that the performance conditions imposed on the variability of responding. Additional analyses investigated the relationship between the personality dimension of openness to experience and general cognitive ability, and the convergent validity of the two personality instruments.

Finally, recommendations are made with regard to future investigations of personality, paying specific attention to the assessment situation.

ACKNOWLEDGEMENTS

Projects of this magnitude invariably involve more than the main actor. I have been blessed over the years with unwavering support, encouragement and assistance with various aspects of this dissertation from family, friends and colleagues.

I first need to thank the advisors I have had the pleasure of working with: the late, great Dr Bill Jones, and Dr Lise Paquette. Dr Tim Pynchyl stepped in at a crucial time and saved this project from falling off the rails. Finally, my co-advisor, the most stalwart Dr Allister MacIntyre who hung in through the most trying challenges. It's a long way from BBCI to here Allister, and I thank you so much for accompanying me on the journey.

I thank my committee members for their early advice, and their support in the final stages: Dr Janet Mantler and Dr John Zelenski; Dr Lorraine Dyke from the Sprott School of Business, and Dr Michael Ashton from Brock University.

Lynn Giff from Psychology Graduate Studies Administration convinced me in 1995 that I should do a PhD at Carleton. For that discussion, and many more over the years Lynn, thanks. I also need to thank Etelle Bourassa who replaced Lynn upon retirement and kept me out, and bailed me out, of administrative trouble so many times.

I must also thank my military superiors who over these years encouraged my studies and provided support at critical times: The late Lieutenant-General C. Couture, Brigadier-General L. Colwell, Colonel G. Matte, Colonel Gord Grant, Colonel Steve Eyres and Colonel Cheryl Lamerson. I want to specially acknowledge the many anonymous Canadian Forces members who participated in my studies.

My friends and colleagues never lost faith in me. You are too many to name but you know who you are – I brought this work up often with you. Of particular note is Colin Mombourquette. Colin thanks also for the kick-start on the analysis, and for reviewing my drafts.

DEDICATION

I am who I am largely because of the foundation of love and encouragement of my family: my father Jim (RIP) and mother Carol Grandmaison for the past 53 years, and my in-laws, Louie (RIP) and June Fauteux for almost 30. To my children Amy, Megan, and Eric, and my wife Wendy, who knows me best and would not let me get down, and who carried the extra burden when I was not available; I love you all. It is to you that this is dedicated.

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INTRODUCTION

“Personality psychology will make an important step towards fulfilling its potential when it begins to assemble a comprehensive inventory of facts concerning the associations between personality and behavior, directly observed in a wide range of situations” (Funder, 2001, p.212)

Organizations that select their members from a pool of applicants and subsequently train, develop, employ, and promote these employees, devote considerable resources to ensure that they select the best possible applicants from the available pool. More specifically, organizations systematically determine which employee characteristics: knowledge, skills, abilities and other attributes (KSAO's), are best related to job performance¹ and then select the best applicants based on those characteristics in order to ensure that scarce resources are allocated appropriately to subsequent employee training and employment. While this process is conceptually simple, people are not. Applicants and employees are the sum of, at a minimum, their previous experiences, their personality traits, their intellectual abilities and their physical abilities. The challenge for personnel selection specialists working in industrial psychology involves evaluating inter-individual differences among job incumbents or job applicants with the ultimate goal of selecting those individuals who will maximize organizational objectives such as productivity, tenure or other aspects of job performance valued by the organization.

Underlying model

The model underlying selection among individuals in industrial psychology is the Classic Prediction Model (Binning & Barrett, 1989; Guion, 1991; Ilgen, 1994) (Figure 1).

¹ Some common terms will be used throughout this thesis. Job performance refers to any behaviour engaged in while conducting work on behalf of an organization. Training performance refers to behaviours engaged in while learning a job. Job and training effectiveness are evaluative terms pointing to individual differences in the performance of the job or in training.

This model relates individual characteristics measures (predictors) to job outcome measures (criteria). For example, the relationship between a test of eye-hand coordination and the number of telephones assembled in an hour. Application of the individual differences approach consists of identifying or developing job relevant criteria and predictors that can differentiate individuals from one another on important job behaviours. As can be seen by the arrows in Figure 1, there are specific inferences regarding the relationships between predictor and criteria constructs and measures relevant to this thesis.

Figure 1. Predictive Model of Personnel Selection

At the construct level, the first inference is that the predictor domain is related to the criterion domain (A). For example, if a particular job is thought to require some aspect of intelligence, then we assume that we can relate the construct of intelligence to this aspect of the job in question. Relationships B and C assume that the predictor measures and their constructs and the criterion measures and their construct are related,

that is, that the measures properly operationalize the constructs so that they may be assessed. The model further assumes a relationship between the predictor measures and the criteria (D), and the final inference is a relationship between the predictor measures and the criterion domain (E). Simply put, if the predictor and criteria measures adequately sample behaviours representative of the predictor and criteria domains, and there is a strong relationship between the measures, then there is a strong likelihood that future job behaviours can be accurately predicted.

While the classic prediction model describes the hypothesized relationships between predictor and criterion constructs and their measures, it does not help us determine what those constructs should be. For that guidance we need to examine models of work performance that will allow us to determine the relevant predictors and criteria. Consequently, the other theoretical model relevant to this thesis is the theory of job performance proposed by Campbell (1990) and derived directly from the work of the U.S. Army in the 1980's. In an effort to identify a comprehensive catalogue of predictor and performance domains and measures, the United States Army commissioned a series of studies dubbed Project Alpha or Project A (Campbell, 1990). Project A extended over a seven-year period, included over 500 studies, and involved almost a half million subjects. These studies identified six areas critical for occupational employment for military members. These critical attributes are; occupation specific proficiency, general military task proficiency, fitness, leadership, personal discipline, and effort. Campbell and associates have extended the initial work of Project A into a comprehensive theory of work performance (Campbell, Gasser, & Oswald, 1996). Their model posits that work is comprised of eight dimensions, not all of which are necessarily present in every job.

These dimensions are: (1) job-specific task proficiency, (2) non-specific job proficiency, (3) written and oral communication, (4) demonstrating effort, (5) maintaining personal discipline, (6) facilitating peer and team performance, (7) supervision/leadership, and (8) management/administration. An examination of this list shows that some of these dimensions are cognitively related and some are not. The features of jobs associated with specific and non-specific proficiency, as well as written and oral communication seem more aligned with cognitive ability, sometimes referred to as the “can-do” aspects of job performance. Those features of jobs associated with effort, discipline, facilitation, and, to some degree leadership, may be more related to personality or temperament-like attributes; the so-called the “will-do” aspects of job performance.

These can-do and will-do job-performance features highlight an important distinction in the job performance literature; that there is a difference between *task* performance and *contextual* performance (Borman & Motowidlo, 1993). Task performance refers to those activities directly related to achieving organizational objectives, such as assembling a product or selling life insurance policies. In contrast, contextual performance refers to those activities that facilitate the task or make possible normal working relationships within the organization, such as getting along with others or motivating a team.

Borman and Motowidlo (1993) propose a five-dimension taxonomy of contextual performance that includes: (1) persisting with enthusiasm and extra effort to complete one’s own tasks, (2) volunteering for task activities that are not part of one’s own job, (3) helping and co-operating with others, (4) following organization rules and procedures, and, (5) endorsing, supporting and defending the organizational objectives. Although

not explicit in this taxonomy, there is a distinction between contextual behaviours as they pertain to actual performance of the job and contextual performance as they pertain to other organizational interests. For example, directly motivating a team when the members are tired, stressed, wet, cold and hungry, such as those fighting a forest fire, is an *essential* part of the task. The task of fighting a fire cannot be completed without these motivating behaviours, and a team leader who cannot motivate people to go beyond the point of when they want to quit will fail in his or her task. This is contrasted with other contextual behaviours, such as volunteering, promoting the organization, and following rules and procedures. Certainly these latter behaviours promote organizational well-being and morale, which in turn may promote increased productivity. However, these behaviours may not relate directly to any particular job. It is the former behaviours, of influencing individuals who are directly engaged in task completion, which are of interest in this study.

Another distinction in the job performance literature that is germane to this paper is that between typical performance and maximal performance (Ployhart, Lim, & Chan, 2001; Sackett, Zedeck & Fogli, 1988). Typical performance is the day-to-day, non-assessment performance people engage in when they are just doing their job. An annual personnel evaluation report is an assessment of typical performance. Maximal performance, by contrast, is characterized by a full-out effort. Ployhart *et. al.* (2001) assert that maximal performance is characterized by the following: (1) an understanding that one is being evaluated, (2) an understanding that one is expected to put out maximum effort, and (3) where the assignment is of limited duration so that one may actually maintain a full-out effort. An example of a maximal performance situation is an

assessment centre. With a maximal performance situation, assuming the individual actually cares about the tasks at hand (i.e., wants to remain employed), motivation is not a factor.

Model summary

The classic prediction model shown in Figure 1 illustrates the relationships between the predictor side and the criterion side of the prediction equation, at both the data and the construct level. The performance domain has been described as consisting of task and contextual performance dimensions, which underlie a model of work performance proposed by Campbell, Gasser and Oswald (1996). The predictor side of the equation is represented by personal constructs typically operationalized in measures of KSAO's that are conceived as relating to the criterion measures. Application of this model lies in 1) identifying measurable job performance criteria, 2) identifying or developing predictors of these criteria that can differentiate among individuals, and 3) testing the relationships between the predictors and the criterion measures.

Research objective

The predictive model of work performance briefly described above provides a context within which to situate the present study. In this dissertation the incremental validity of personality traits to predict job performance was the primary focus. The vehicle that was used to test this relationship was leadership performance in a military training context. The present study compared the predictive validity of two self-report personality measures in terms of their ability to predict leadership effectiveness beyond what can be predicted by general cognitive ability and bio-data. Moreover, the performance domain in this study represented both task and contextual performance

elements (Borman & Motowidlo, 1993; Murphy & Shiarella, 1997) within a maximal performance paradigm (Ployhart, Lim, & Chan, 2001).

LITERATURE REVIEW

Psychological predictors of behaviour – moving beyond general intelligence (“g”)

There are myriad options available to assist selection specialists in matching people to jobs, including: formal tests of intelligence, job sampling, selection centres, physical abilities tests and interviews of various types. Of this list, it is widely accepted that general cognitive ability testing is an important component of the personnel selection process and cognitive tests have been shown to be the single best predictor of future job performance (e.g., Hunter & Hunter, 1984; Schmidt & Hunter, 1998)². Virtually all organizations that provide job training internally use some form of cognitive ability testing. One of the problems with relying too heavily on cognitive measures, however, is that they only tell part of the story. They tell us that someone *can* accomplish a job to a specific performance standard, they do not tell us whether or not they *will*.

Consequently, a number of other factors need to be considered in addition to cognitive measures.

Recent research tells us that non-cognitive attributes (e.g., personality) can advance the prediction of job relevant behaviours (Barrick & Mount, 1991; Tett, Jackson & Rothstein, 1991). Of interest to many organizations, particularly in ones where training follows hiring, is the potential for personality to account for incremental variance in job performance beyond that accounted for by cognitive ability alone. In view of the fact that personality variables are generally not correlated with cognitive ability (Collis,

² For a complete discussion of this area, the first special issue of the Journal of Vocational Behavior (1986, 29, 3) was dedicated to the issue of “g” in employment.

1995; Hough & Ones, 2001), the potential for incremental validity in the prediction of job performance is evident. Moreover, as will be seen, the incremental validity of personality may be more relevant if the jobs under consideration are complex and non-routine (Murphy, 1994). That is, it may be sufficient to measure eye-hand co-ordination for an assembly line task but if the applicant is expected to do a variety of complex tasks and work with a team (e.g., firemen), then a more complete picture of the individual's capabilities is needed. In these cases, assessment of the whole-person is preferred.³ As a result of the recently renewed interest in personality assessment as related to the world of work, this is in fact the direction personnel selection is heading.

The Five Factor Model of Personality

There is a substantial and growing consensus that personality can be adequately described in terms of five broad personality factors; the so called Five-Factor Model (FFM) or Big-Five (B5) (Costa & McCrae, 1992; Fujita, 1996; House & Aditya, 1979; Judge, Bono, Ilies, & Gerhardt, 2002; McManus & Kelly, 1999). Proponents of the FFM are unequivocal in declaring that the FFM is sufficient in setting the bounds for the normal personality. This assertion was first made by Tupes and Christal (1961, p.14) who initially reported this personality structure; “there are five relatively strong and recurrent factors and nothing more of any consequence”. Since this statement was made, a substantial amount of research has focussed on confirming or disputing this stance.

³ The term “whole-person” is commonly used in the medical realm where treatment includes not only the presenting symptoms but also the emotional, spiritual and general health and lifestyle concerns of the patient. In the present context, the whole-person approach means assessing, to the extent possible, all the experiences and abilities an individual brings to the selection situation.

Short history of the Big-Five⁴

The FFM is rooted in the lexical hypothesis (Goldberg, 1981), the notion that all meaningful descriptions of behaviour are encoded in the natural language. This hypothesis suggests that all aspects of human personality which are of importance or utility eventually come to be encoded in the natural language (Cloninger, 2000). Howard and Howard (2003, p.2) state that, because language is about what we experience and language is the one element that all theories have in common, "...it is from language itself, and not theories, that we must extract the source metaphor for describing personality".

Moreover, McCrae and Costa (1999, p.140) argue that the FFM, "...implicitly adopts the basic tenets of trait theory – that individuals can be characterized in terms of relatively enduring patterns of thought, feeling, and actions...". It is precisely because traits allow us to identify and predict recurrent patterns of individual behaviour that makes them ideal for the study of personality. In fact, according to Winter and Barenbaum (1999), traits are the *fundamental unit*. It is, therefore, fundamental to the FFM that the basic tenets of trait theory are accepted as well as the lexical hypothesis. Without these, as was so succinctly stated by Fujita (1996), "either we accept the lexical hypothesis or we take our ball and go home. ... if the lexical hypothesis is false, the Big Five factors of personality become the Big Five factors of English personality descriptors".

⁴ This section aims to provide a succinct overview of trait research as it pertains to the Big Five. More comprehensive reviews of the historical antecedents of trait research are provided in the chapters by Winter and Barenbaum, (1999) and by John and Srivastava (1999) in Pervin and John's (1999) *Handbook of Personality*.

Tupes and Christal (1961) are generally credited with the first observance of five stable personality factors (Collis & Elshaw, 1998; Hogan & Roberts, 2001). Following a re-analysis of data from eight samples on 35 personality traits, five factors consistently emerged (Collis, 1997). However, since the authors published their results in an obscure US Air Force technical publication, this was not recognized for some years later. Tupes and Christal, in turn, had been following a long stream of work that started with Allport's pioneering studies on traits as the fundamental units for the study of personality (Winter & Barenbaum, 1999). This stream flowed through Cattell's (1943) reduction of Allport's almost 18,000 adjectives and his subsequent exposition of 16 personality factors (the 16PF) and Fiske's (1949) further reduction of Cattell's variables.

Following the work of Tupes and Christal, several researchers replicated the finding that personality could be adequately described by five factors, regardless of the method used to collect the data such as self-report, peer review, and supervisor ratings (John, 1990). In fact, an impressive body of literature supporting the Big Five factor structure has been accumulating over the past two decades (Mervielde, 1993; Tsaousis & Nikolaou, 2001, Aziz & Jackson, 2001, McCrae & Costa, 1999, Goldberg, 1981).

The Five-Factor hierarchy

Conceptually, the Big Five factors (described below) are the top of a hierarchy of personality traits that encompass an assortment of lower order traits that tend to cluster together – hence the name Big Five (John & Srivastava, 1999). The simple structure of the FFM is not meant to imply that all of personality can be reduced to only five factors, it means that: “these five dimensions represent personality at the broadest level of abstraction, and each dimension summarizes a large number of distinct, more specific

personality characteristics” (John & Srivastava, 1999, p. 105). That is, personality traits are many and varied, but when logically grouped together, the most parsimonious descriptive taxonomy is five broad factors.

Considering the number of personality traits that can be described (almost 18,000 according to Allport and Odbert, 1936), this is an astounding claim. Notwithstanding this enormous number of individual personality-related trait words, there is an impressive body of research supporting the reduction of these traits into a hierarchical description of personality most frequently reflected in the Big Five factor structure (Aziz & Jackson, 2001; Goldberg, 1981; McCrae & Costa, 1999; Mervielde, 1993; Tsaousis & Nikolaou, 2001). For example, O’Connor (2002) examined the factor structure of 28 common personality inventories and found that the FFM structure could be replicated in all but two. Fujita (1996) examined the literature comparing other major trait models of personality and came to the same conclusion: “it seems possible to incorporate all seriously competing theoretical systems into the Big Five set” (p.4). What makes the FFM so appealing to researchers is, in fact, that an organizing taxonomy has finally emerged that makes sense of the myriad competing personality models. As a paradigm for describing personality, the FFM’s greatest contribution may well be revealing a common taxonomy within which to conduct personality research (Fujita, 1996; House & Aditya, 1979; Judge, Bono, Ilies, & Gerhardt, 2002; McManus & Kelly, 1999).

While some naming differences exist, the five factors are most frequently labelled as follows: (1) Openness to experience, (2) Conscientiousness, (3) Extraversion, (4) Agreeableness, and (5) Neuroticism (Barrick & Mount, 1991).⁵ Openness is

⁵ To facilitate recall of the five factors, the British Navy, has applied the acronym OCEAN; the acronym CANOE would be appropriate for a Canadian version and is attributed to Colin Mombourquette 1997.

associated with being imaginative, cultured, intelligent, artistic and broad-minded.

Openness is sometimes a problematic factor. Tupes and Christal (1961) originally labelled this factor Culture, and speculated that it represented the traits of imagination, socially polished, philosophical, and aesthetically fastidious. Other researchers suggest openness is more aptly described as representing fantasy, ideas, personal values, and wide interests (Costa & McCrae, 1992). There is substantial speculation that openness is related to intelligence, although not necessarily psychometric intelligence as it is usually conceived. It may be more associated with an interest in novel ideas, general awareness of culturally interesting phenomena, imagination, and the like (Chamorro-Premuzic & Furnham, 2005).

Conscientiousness, sometimes called Dependability (Hogan, 1983) or Will to Achieve (Digman, 1989) is associated with being hard-working, achievement oriented, organized, planful, and responsible. Extraversion is the Eysenckian version, consisting of being sociable, gregarious, talkative, etc. Hogan (1986) conceptualizes this factor as being comprised of two independent factors, Ambition and Sociability. The agreeableness factor describes people who are likable, softhearted, good-natured, courteous and trusting. Finally, neuroticism describes people who are anxious, insecure, depressed and emotional. In the reverse, neuroticism is sometimes called emotional stability.

Within the FFM hierarchy, trait words are at the lowest and most specific descriptive level, while factors represent the highest and most abstract level. An intermediate organizing level, frequently called facets, represents the first clustering of similar trait words into a trait description. For example, within one measure of the big-

five, the Trait-Self Description Inventory (T-SD), the single factor of conscientiousness is comprised of three facets (Efficient and Dependable, Hardworking, and Organized) represented by 26 individual trait words. It is this intermediate level of facet clustering that holds significant promise for personnel selection. Individual trait words are simply far too numerous to be of much practical use, and, it may be that factors are too abstract. Facets represent a level of description that makes both intuitive and theoretical sense. For example, combining individual related trait words into a facet, such as Honesty, allows for exploration of this particular trait while not losing its meaning in the noise of a larger factor. Whether facets are the correct level of grouping for personnel selection purposes is an empirical and theoretical question that will be explored later.

The number of facets that can be derived within any particular instrument is limited only by the number of combinations of trait words into meaningful groupings. At the extreme, it is the number of combinations of almost 18,000 trait words. In practical terms, facets are constructed either empirically or with some theoretical perspective to govern the trait word groupings. In the case of the T-SD for example, which has 163 items, 22 facets were identified following five separate factor analyses (Collis, 1997). The numbers of facets in the T-SD are not equal for each factor. In the case of the Neuroticism, Extraversion, Openness - Personality Inventory – Revised (NEO-PI-R or NEO), six facets per factor were deliberately constructed to represent traits that occur frequently in the literature and that were important to personality psychologists (Costa & McCrae, 1992).

Notwithstanding the appeal to examine personality and job performance relationships with more fidelity, the problem with facets at this time is the same one that

plagued researchers with regard to factors in the past, that is, a working taxonomy. There is no consensus with regards to the number or definition of facets. As reported in Barrick, Mount and Judge (2001), the Personal Characteristics Inventory has 12 facets, the Hogan Personality Inventory has 44, the Abridged Big 5 Circumplex has 45, as well as the 30 facets from the NEO and the 22 from the T-SD reported above. This lack of an agreed upon facet structure and definitions presents challenges for researchers to design experiments and to interpret and communicate their results in a consistent manner. Nonetheless, facets are easily understood trait descriptions and are at a useful level of fidelity for investigation.

Versions of the Big-Five Personality Factors

A number of measures have been designed to operationalize the Big Five leading Waller and Ben-Porath (1987) to ask, “Which Big Five?”. Many versions, however, were developed with specific uses in mind, for example, those that emphasize the more maladaptive traits, those designed for clinical assessment, those used for personnel selection, or for use in health psychology (Widiger & Trull, 1997). Salgado (2003) reports that there are over 15 Big Five measures in operational use in the USA and Europe. Examples of Big Five measures include the most popular Neuroticism, Extraversion, Openness – Personality Inventory (NEO-PI-R) (Costa & McCrae, 1995), as well as the Abridged Big Five Circumplex (AB5C) model (Goldberg, 1992); various versions developed from the international personality item pool (IPIP) Goldberg, 1998), and the Trait-Self Description inventory (T-SD) (Christal, 1993). Given the diversity of measures, it is reasonable to ask if they are all measuring the same thing. John (1990) attempted to answer this question by taking 300 items from the adjective checklist and

having 10 judges assign them to one of the Big Five factors. Of the 112 items assigned with over 90% agreement, a factor analysis of another data set correctly placed 111 of the 112 items in the appropriate factor, suggesting that there is very strong agreement about what the factors represent. It is clear, however, that with the readily available Big Five instruments, there is as yet no “gold standard” (John & Srivastava, 1999), although the NEO is probably the most widely recognized and used measure.

Not only are there numerous versions of the FFM, but the method of presentation of trait words varies across instruments. Some versions use sentences to describe the traits of interest and others use only traits words. For example, the NEO uses statements, operating under the premise that statements put the individual trait words into a context and, therefore, provide respondents with a more precise understanding of the trait. Goldberg’s marker sets use single adjectives, which are presumed to adhere more precisely to the lexical hypothesis (Widiger & Trull, 1997), and allows respondents to bestow their own understanding of the trait words. The Trait – Self Description (T-SD) (Christal, 1993) uses both single adjectives and sentences and, therefore, leverages the advantages of both methods of inquiry.

Criticisms of FFM

The FFM has not been universally accepted as the definitive solution for describing personality and has been challenged on a number of fronts including the number of factors, the underlying lexical hypothesis, factor analyses considerations, and meaning of the factors (Block, 1995). One debate surrounding the FFM is the number of factors necessary to represent the personality structure. Hogan (1999) and Ashton, Lee, Perugini, et.al. (2004) suggest that six Factors are evident, and Eysenck (1991) suggests

three are sufficient. Recently Holden, Wasylikiw, Starzyk, Book and Edwards (2006) examined the NEO-FFI traits and produced a four-factor solution. The fact that some researchers find solutions that differ from the usual five factors means one of several things. It is possible that there are not exactly five factors, and this observation is emerging as more research is targeted at the Big Five. Possibly some newer factors are better described as facets or as compound factors. It is also possible that some factors are simply repackaged variants of the big five. For example, Hogan (1986) conceptualizes extraversion as two factors, Ambition and Sociability, and Eysenck's Psychoticism factor is suggested by Block (1995) and Goldberg, Sweeney, Merenda, and Hughes (1999) as being composed of agreeableness and conscientiousness. It is still early days in this research however, and although the bulk of the evidence points to five factors, it is not yet appropriate to elevate the five factors to the status of a law.

Another criticism of the FFM centers on the methods used to produce the five-factor solution, factor analyses:

“the method of factor-analysis is not a completely objective technique, as it has a number of inherent limitations and requires arbitrary decisions. The use of factor-analysis in the development of the NEO FFM was particularly remote from objective discovery. A series of inadequately elaborated rational decisions, motivated by the need to achieve reliable, orthogonal factor structure, guided the selection of items” (Dawda, 1997).

This quote illustrates a couple of issues with factor analysis as it pertains to the development of the FFM. First, the choice of items to include in questionnaires to some degree predetermines the final solution. This criticism arises because of the initial reduction of 18,000 trait words into Cattell's 35 variables. Selection of items from such a severely reduced list limits the available factor options. Widiger and Trull (1997) point

out that there are many ways to sample the universe of trait words. If, for example, items were chosen for a new scale that is mostly representative of conscientiousness, then the factor solution would be pre-determined. Selection of items that are reflective of maladaptive traits can also produce five-factor solution, but not one that describes the normal personality, as we generally understand the FFM to do.

The second issue raised above is related to factor rotation in factor analyses. Orthogonal rotation is typically used in exploring the FFM structure because the FFM assumes that the factors are relatively independent of each other. Soucier and Goldberg (2002) are of the opinion that: "... it would be worthwhile to insist that an independent-factor model should contain only mutually independent factors" (p.57). Other rotations however are sometimes employed for specific research reasons. The problem with non-orthogonal rotations is that they can make interpretation of the factors more difficult. Thus, while orthogonal rotations force a solution that may exclude important variables in its quest for simplicity, it maintains the independence of the factors and makes interpretability of the factors easier. However, ease of interpretation should not win out over accurately representing the domain of personality when it makes empirical or theoretical sense to explore beyond the established five factors.

Most models of personality represent a particular theoretical perspective (Widiger & Trull, 1997), however, the FFM assumes a theoretically non-aligned position and, in fact, is primarily based on empirical evidence (Soucier & Goldberg, 2002). Consequently, another criticism of the FFM is that it is atheoretical (Block, 1995; Fujita, 1996). The fact is, as stated by Fujita (1996): "...the Big Five is a not a personality theory at all. It is a datum, which any theory of personality must explain". Kaiser (1998)

agrees: “ It is not a theory of personality *per se*; rather the Five-Factor Model (FFM) is an empirical way of summarizing – at a relatively abstract and broad level – the pattern of relationships among objective measures of personality constructs” (p.5). Saucier and Goldberg (2002) remark that the Big Five factors are: “... five orthogonal factors that capture the five largest sources of variance shared by the variables in fairly representative assemblage of personality-attribute descriptors...” (p.30). Finally, Widiger and Trull (1997) opine that the FFM represents the traits of personality that: “... will not favour any one particular theoretical model.” (p.229). Thus, although cited as a criticism, the fact that the FFM is atheoretical is considered a strength by most researchers precisely because it does not subscribe to, nor is constrained by, any particular theory of personality.

Summary of Personality

Following decades of largely unconnected research on defining the major traits of personality and their organizing taxonomy, the general consensus in the literature is that the normal personality is adequately described by five big factors. Various authors argue for more than five or less than five, however, at this time the greater part of the evidence supports five factors. These five factors subsume individual trait words at the lowest level and facets, distinct traits, as an intermediate level of description. The foundation upon which the five-factor model rests is the lexical hypothesis, the notion that meaningful traits have been encoded in everyday language. One of the greatest contributions the FFM has made to date is in providing an organizing taxonomy within which personality research may be conducted, interpreted and communicated.

Personality and Job Performance

With regard to the usefulness of personality in personnel selection, the strength of the FFM as an organizing taxonomy has re-opened a line of research that had been stagnant for about 50 years, ever since the critical reviews of Stogdill (1948) and Mann (1959). In the past 15 years numerous meta-analysis have been conducted that clearly demonstrate the efficacy of personality in the prediction of work performance (Barrick & Mount, 1991; Hurtz & Donovan, 2000; Judge, Bono, Ilies, & Gerhardt, 2002; Salgado, 2003; Tett, Jackson & Rothstein, 1991).

In the personnel selection context, personality measures have, in general, thought to be relatively poor predictors of job performance compared with cognitive measures, (Hogan & Roberts, 2001). Their strength, however, may lie in their ability to add to the predictive validity of cognitive measures in predicting task performance (incremental validity), or in their ability to predict the non-cognitive (contextual) aspects of the job performance domain (John & Srivistava, 1999). This is also the conclusion from the research in Project A, described earlier in this paper (Campbell, 1991). Of the five components of job performance identified in this research program (core technical proficiency, general soldiering proficiency, effort and leadership, personal discipline, and fitness and military bearing), the first two were best predicted by a cognitive measure and the latter three by a personality/temperament measure (McHenry, *et. al.*, 1990). Other researchers have found similar results (Cf. Driskell, *et. al.*, 1994). Moreover, Collis (1995) demonstrated that the T-SD personality inventory tapped attributes different from those assessed with the Armed Services Vocational Aptitude Battery (ASVAB), a battery

of cognitive tests used for selection and assignment in the US Armed Forces, suggesting that the T-SD may add incrementally to what the ASVAB already predicts.

Two prominent studies can be credited with re-kindling interest in personality as it relates to the world of work. First, Barrick and Mount (1991) conducted a meta-analysis of 117 studies that reported criterion related validities. They found that the conscientiousness factor spans the job categories of professional, police, managers, sales and skilled/semi-skilled occupations with correlations ranging from .20 to .23. They argued that this would be so on theoretical grounds and concluded that: "...this aspect of personality appears to tap traits which are important to the accomplishment of work tasks in all jobs" (p.18). Furthermore, they found significant correlations between the criterion of training proficiency and the factors of openness and extraversion of .25 and .26 respectively.

While conscientiousness has been amply demonstrated to be a valid predictor of performance across many jobs, in the second influential meta-analysis, Tett, *et. al.*(1991) found that agreeableness was the personality factor that best predicted job performance ($r = .33$) with validities, on average, of 0.24 for all the Big Five measures. More recently, Salgado (1997; 2003) in meta-analyses with European studies also observed that personality traits, especially conscientiousness ($r = .28$) and emotional stability ($r = .16$), are predictive of performance across a variety of jobs. Finally, Judge, Bono, Ilies, and Gerhardt (2002) in a meta-analysis of 78 studies demonstrated that the Big Five traits of extraversion and conscientiousness predict leadership emergence (both $r = .33$), with neuroticism, openness, and agreeableness correlating at -.24, .24 and .05 respectively. Neuroticism, extraversion, and openness to experience predicted leadership effectiveness

(-.22, .24 and .24 respectively) with agreeableness and conscientiousness correlating .21 and .16 respectively.

Moreover, as a direct result of the resurgence of interest in personality in personnel selection, besides the meta-analyses cited above, many separate criterion validity studies have been carried out in the past 15 years (Barrick, Mount and Judge, 2001; Elshaw & Abram, 1997; Judge, Bono, Ilies, & Gerhardt, 2002; Mervielde, 1993; O'Keefe, 1998). For example, in two Canadian Forces studies, O'Keefe (1998) assessed the validities of a number of personality instruments against global measures of either job performance or training performance. In one study, the Measure of Personal Attributes (MPA), a seven- factor temperament instrument developed for the US Army, was administered to 754 CF members as part of an omnibus survey. Respondents were also asked to report their most recent annual personnel evaluation report (PER) score, a global score that ranges from one to four indicating adverse, normal, superior or outstanding performance. Two scales, Dominance and Achievement, predicted PER scores for officers and for non-commissioned members (NCMs) accounting for 5% and 9% of the variance respectively. In O'Keefe's second study, five personality measures were administered to officers and non-commissioned members undergoing basic training. The predictors were the NEO-PI-R (Costa & McCrae, 1992), MPA, Assessment of Individual Motivation (AIM: a proprietary instrument developed at the US Army Research Institute), 16PF (Cattell & Cattell, 1995), and the T-SD (Christal, 1993). Using overall training outcome scores as criteria (ranging from one to five), only the two specifically designed Big Five measures, the NEO and the T-SD, showed any predictive validity. Of the two, the T-SD was better, with the neuroticism scale accounting for 17% of the

variance for NCMs and the neuroticism and extraversion scales predicting 5% of the variance for officers. O’Keefe summarized his findings by stating that; “of the five occupational personality measures used in this research, the T-SD appears to be the most promising for use within the CF” (p. 23).

In addition to the job performance criteria described above, personality tests based on the Big Five taxonomy have also been shown to predict grade point averages (Mervielde, 1993; Paunonen & Nicol, 2001), student leadership (Judge, Bono, Ilies, & Gerhardt, 2002), wastage from military training (Elshaw & Abram, 1997) and a number of socially relevant criteria such as speeding, tobacco consumption, and tardiness (Paunonen & Ashton, 2001). Personality tests have also been shown to have less adverse impact than traditional cognitive tests (Collis, 1995; Hogan, Hogan & Roberts, 1996). With regard to personnel selection, this latter issue is important as employers are interested in creating or maintaining diversity in their workforce and traditional measures of cognitive ability frequently generate different results for minority groups (Hogan & Roberts, 2001).

An area of personality-job performance that has received some attention is that regarding the moderating effect of the “strength” of the situation (Beaty, Cleveland, & Murphy, 2001; Mischel, 1977). According to this proposition, personality variables are more important in situations where there is not a clear and known manner in which to act. When the rules are not known or are inconsistent (e.g., unclear rules of armed engagement), there is the potential for much more variability in responding. According to Mischel (1977), *strong* situations promote certain expectations concerning appropriate conduct amongst the people in the situation. Group appropriate (normative) behaviour is

expected and rewarded. Conversely, *weak* situations lack the environmental cues and rewards inherent in strong situations. In weak situations, there is a definite lack of normative behaviour to model, or at least a considerable degree of ambiguity, and so, individual dispositions are more likely to govern behaviour.

Judge, *et. al.* (2002) suggest, for example, that conscientiousness is an important trait when task structure is low. The hallmarks of conscientiousness: dependability, achievement- oriented, responsibility, and the ability and desire to focus on the job would, in the absence of clear direction, be desirable attributes. The Judge, *et. al.*, notion is also supported by House, Shane and Herold (1996) who suggest that weak situations allow more dispositional (personal) forces to act. Thus, if personality variables have more influence in weak situations, that is, “in which strong cultures and histories are absent” (Bono & Judge, 2004, p. 907), then relationships between personality and leadership behaviour would be attenuated in strong situations, as in formal organizations such as militaries.

The Criterion Problem

Of the problems facing selection researchers, the criterion problem may well be the most difficult to address. In 1967, Christensen and Mills observed that, “The criterion problem is much like the weather – all psychologists talk about it but very few do much about it. And yet its central importance is disputed by no one” (p.335). Almost forty years have passed since this statement was made and still it seems that a great deal less attention is paid to criterion issues than is paid to predictor issues (see also Johnson, 2002). There does not appear to be any shortage of predictors, of all varieties, available to selection personnel. It is the criterion, however, which is generally the least well-

developed side of the coin. One concern in this regard is the specificity of the criteria (Robertson, 1994), which is exactly the same argument proffered for predictor specificity. Does one assess predictors against an overall measure of job performance or against specific elements of that job? Bittel (1984), for example, provides two lists of leadership performance qualities derived from major US corporations. These lists contain 18 and 14 potential criteria, each of which may be assessed separately or amassed into an overall performance score. It is the nature of most jobs that they are multi-dimensional (Sumer, Sumer, Demirutku, & Cifci, 2001). Does it make more sense, therefore, to say that an individual is a “good leader” overall, or is it make more meaningful to say someone is a good organizer, can motivate people, has a vision, plans well, etc? In other words, decompose overall effectiveness into its subordinate parts. How the performance domain is conceptualized is of critical importance in determining the validity of the predictors.

This multi-dimensionality of jobs suggests selecting a methodology where specific multiple predictors should be chosen for their presumed or demonstrated relationship to the specific criteria of interest. Simply throwing all the available predictors and criteria into an equation is not likely to be very fruitful without some guiding theory or model to anticipate and interpret the results. Research has shown that validities are improved when an instrument is designed with specific criteria in mind (i.e., there is at least a theoretical link between the predictor and criteria) (Borman, Hanson, & Hedge, 1997; Hough & Schneider, 1996). This latter point is directly observed in the predictive model shown in Fig 1., arrows A and D. Dudley, Orvis and Lebiecki (2003) are unequivocal: “when utilizing narrow trait measures to predict specific, narrow criterion, the particular narrow trait (s) should be selected based on a strong substantive

relationship to the criterion” (p. 15). While they were arguing for narrow versus broad trait measurement, the point none-the-less is that the predictor and criterion must have a specific theoretical relationship.

Furthermore, Hough (1992) suggests that personality-performance relationships are frequently not detected because criteria are collapsed across constructs rather than within constructs. Put another way, the failure to find predictive relationships may be due to the fact that the criteria of interest, typically a measure of overall performance, are just so broad that in fact they encompass more than one construct. Sumer, Sumer, Demirutku, and Cifci (2001) make this very point; the “performance domain is expanding, and task performance by itself seems to be inadequate in representing the domain of job performance” (p. 129). That is, job performance is more complex than a compilation of simple tasks; it also contains elements of contextual (interpersonal) performance (Borman & Motowidlo, 1993; Murphy & Shiarella, 1997). The literature suggests that task performance is more effectively predicted by cognitive ability, and that the value of personality variables lies in their ability to predict contextual performance (Hough et. al, 1990; Hurtz & Donovan, 2000). Thus, reaffirming the inferences in the model at Figure 1., the conceptual relationship of the predictors with the criteria is a necessary condition for the accurate prediction of work behaviour.

Bandwidth-fidelity Dilemma

A recurring theme in the personality-job performance literature highlighted above is whether to assess personality at the level of a broad factor or at a more specific facet level, where the personality construct is more distinct or theoretically related to an

outcome measure of interest, that is, the bandwidth-fidelity dilemma (Cronbach, 1990).

Hunt and Paajanen (2003) summarize the issue as follows:

“Are the broad personality constructs contained in the five factor model the most useful and parsimonious way to describe personality as it relates to job performance, or are a greater variety of more narrowly defined constructs needed to better understand how personality affects job success?” (p. 2).

It should be acknowledged up front that this issue is not necessarily an either-or position. It is likely that narrow traits will be better at predicting many criteria because of their specificity. A practical position may be to use traits whenever possible because they can generally be combined into factors, whereas the reverse is not always true.

Tett, Steele and Beauregard (2003) demonstrated that more specific variables provide better prediction of work behaviours than do more broad factors. Paunonen and Ashton (2001) found that facets did better in predicting a range of behaviours (e.g., final course grades) than did factors. They, and others (e.g., Howard & Howard, 2003) advocate using more narrowly defined facets. Axton, Sederburg and Wolf (2004) examined the predictive validity of factors and facets on financial sales and service personnel using the HPI. They found that specific facets predicted performance equally as well as their broader factors. John and Srivastava (1999) are equivocal, recognizing that a broadband measure, while being inclusive, may lack the fidelity necessary to detect meaningful relationships.

In contrast, Hogan and Roberts (1996) suggest that because job performance is complex and multidimensional, broadband predictors would normally be more useful in personnel selection. This is in keeping with Cronbach (1990) who suggests that a more complex criterion requires a more complex predictor to maximize the predictor-criterion relationship. It is likely, however, that both levels of analysis are useful depending on the

research question. Dudley, Orvis and Lebiecki (2003) opine that the fidelity-bandwidth dilemma is still very much alive and consequently, research designed to illuminate this issue is still needed.

Moving beyond factors and facets, Hough and Schneider (1996) suggest that personality traits can also be organized as either basic or compound traits. Compound traits are created when the criteria of interest are identified and then the basic traits relating to them, which are hypothesized to maximally predict them, are blended into a single personality construct which, in essence, produces a super factor. For example, the construct of customer service is comprised of conscientiousness, agreeableness and Emotional Stability (Costa & McCrae, 1995). Compounds may also be created from specific traits drawn from different factors. There is evidence that compound traits are better predictors than basic traits alone (Costa & McCrae, 1995; Foster, 2004; Hough, 1992; Ones, *et. al.*, 1993), and even factors alone (Ones, Viswesvaran, & Dilchert, 2005). For example, Foster (2004) showed that conscientiousness alone predicts job performance in urban train operators ($r = .19$), however, when paired with other Big Five traits into composites, the multiple correlation rose to $R = .33$. Ones, *et. al.* (1993) showed that integrity tests have a higher validity for predicting some job performance; supervisor's ratings and counter productive behaviours. Moreover, they show that integrity tests represent a composite factor that is an amalgam of conscientiousness, agreeableness and emotional stability. Compound traits are a promising area of research on the big five that requires more examination.

Stability of Traits

One important tenet of the individual differences approach to selection is that future behaviour is best predicted by past behaviour. A consideration for the use of traits in the personnel selection context, therefore, is temporal stability (Ilgen, 1994).

Temporal stability refers to the degree to which a trait measured at one point in time is similarly represented at some future point in time. This distinguishes traits, as relatively stable aspects of the individual, from states, or transient moods (Stokes-Hendricks, 2002).

Clearly high degrees of variation in trait behaviour make the prediction of future performance difficult, if not impossible. Fortunately, personality traits appear to be temporally stable (Clark & Watson, 1999; Soldz & Vaillant, 1999). For example, Clark and Watson (1999) reviewed the literature on temporal stability of personality and concluded that personality remains stable over periods as long as 30 years commencing as early as late adolescence.

Summary of Personality and Job Performance

It is clear from the literature that a relationship exists between personality and job performance. Jobs are characterized as multi-dimensional and comprised of more than tasks; they also contain contextual (interpersonal) elements. It is important, therefore, to adequately describe the performance and the predictor domains if important relationships are to be illuminated. The efficacy of personality in the prediction of job performance is more related to contextual elements than to task elements. It is also clear that the dominant taxonomy with which to study this relationship is the hierarchical five-factor model. What is less clear, however, is whether the factor level or the facet level is the appropriate one to use (i.e., the bandwidth-fidelity dilemma). Both intelligence and

personality traits are temporally stable and, therefore, are appropriate constructs with which to explore trait-performance relationships.

Criteria of interest

The primary goal of personnel selection is prediction; prediction of whom among the eligible people will pass a training course, should be promoted, should be selected for specialized assignment, or any other criteria of interest to the organization. One area of critical interest to many organizations, including the CF, is the prediction of leadership. Leadership in its broadest sense refers to the application of influence in the attainment of organizational objectives (Robbins and Langton, 1999). The vehicle used to test the incremental validity of personality in the prediction of work behaviour in this thesis is leadership behaviours, assessed while the participants were students on formal CF leadership training courses.

The CF has recently redefined its doctrine on leadership and promulgated it in the CF publication, *Leadership in the Canadian Forces: Conceptual Foundations*. The definition of leadership that was adopted is: “Directing, motivating, and enabling others to accomplish the mission professionally and ethically, while developing or improving capabilities that contribute to mission success”. This definition incorporates three elements that are common to many definitions of leadership, namely, influencing, the presence of a group, and a goal (Bryman, 1992; Sims & Manz, 1996). This definition does not limit or define the type of influence (formal authority, personal, coercive, etc.), the group (small group face-to-face or an entire organization), or the goal (immediate and small, or strategic organizational change).

One feature of leadership that does not receive much attention in the literature is the distinction between *direct* leadership and *indirect* leadership. Direct leadership refers to the face-to-face influence behaviours, directed either toward individuals or larger parts of the organization. Indirect leadership refers to influence behaviours that do not show a straight linear impact on organizational behaviours (Wenck, 2002). Most of the literature does not make this distinction explicit. In fact, much of the recent literature refers only to indirect leadership functions without identifying them as such. For example, Steere (1996) suggests that a leader's job has more to do with cultural definition, identifying core values, championing causes and cultures, and the like. Avolio (1999) is also of this opinion, and states, "if a leader has a direct impact on performance, she or he is probably too directly involved in what the other person or group is doing" (p.167). Smircich and Morgan (1982) suggest that leadership is about the lofty pursuit of shared meanings. Jacobs and Jaques (1991) go so far as to suggest that focus on face-to-face (direct) leadership has: "...led to a number of conceptual flaws that impeded theory building. Among them were the *attempt to form direct connections between leadership behaviour and outcomes...*" (p.431; emphasis added). This latter point is informative in that it suggests that searching for direct links from the individual leaders behaviour to some organizational outcome is nugatory.

This point is of particular interest in this thesis; the direct role of the individual leader in influencing group behaviour to achieve a goal. One does not need to have any first hand military experience to understand that, in many military situations, it is all about directly leading people. The CF devotes considerable time and resources to selecting, training and developing leaders. For officers, training starts immediately upon

enrolment, during basic training. For non-officers, leadership training and development commences a little later in their careers, as they are being prepared through promotion or assignment to lead personnel. And, for all personnel, it is expected that they will demonstrate leadership at every opportunity by, for example, behaving ethically, mentoring junior members, going beyond the minimum requirements of their job, treating people with respect, being a team player, being a model for others, etc.

Another feature of leadership is that it occurs at all levels within organizations and not just with those occupying formal leadership positions and charged with guiding the entire organization (Jacobs & Jaques, 1991; Wenek, 2002). Moreover, Wenek (2002) states that; “leadership should be understood in terms of both formal authority and personal influence,” (p.22) suggesting that personality attributes play a major role in leadership effectiveness. This is shown in the model of effective CF leadership in the Framework section below and is consistent with the literature previously discussed with regard to contextual behaviour and job performance.

Framework

Wenek (2003) developed a model of effective CF leadership based on Yukl’s Multiple-Linkages Model (2002) (Fig. 2). This is a normative process model and, as such, describes what people do in order to generate a desired outcome, in this case effective leadership. Figure 2 shows the major elements of this model are the leaders sources of power, their abilities and behaviour, situational variables, internal and external constraints to the leaders behaviours, and outcomes.

Figure 2. Values-based multiple-linkage process model of effective CF leadership.

Figure 3 simplifies this model. The paths shown in bold in Figure 3 indicate the relationships of interest between personal attributes, through direct leadership actions to task success. That is, the path of concern is that influence exerted by an individual leader directly on a group in the completion of a task. The major personal attributes of interest are general intelligence, and personality. The leaders behaviors are influenced by, among other things, their experiences, their training, their cognitive abilities, and their personality.

Figure 3. Simplified normative influence model.

Summary of Literature Review and Research Roadmap

This study extends the understanding of the relationship of personality traits in directly predicting meaningful work behaviours and in part answers Funder (2001), quoted at the start of this thesis. This research adds to the existing literature in several important ways.

Dudley, Orvis and Lebiecki (2003) suggest that research on personality and job performance should examine both simple validity coefficients and incremental validity. This research provided an opportunity to examine the incremental validity of two Big Five measures on performance over that obtained by cognitive and bio-data measures alone.

Performance can be characterized as comprising both contextual and task elements. Contextual performance is related to personality/ temperamental characteristics while task performance is related to cognitive characteristics. In this study, leadership performance was intentionally assessed at both the contextual and the task level, as well as measured overall. Additionally, the criteria used in this research represents a maximal performance situation and so provide greater clarity to the performance domain being assessed. That is, motivation is not expected to confound participants' performance; they will all be working at their peak performance level.

Several studies with personality and job performance are known to demonstrate specificity on both sides of the prediction equation (e.g., Tett, Steele & Beauregard, 2003; Paunonen & Ashton, 2001). That is, complex personality factors are decomposed on the predictive side into more specific personality traits, and complex performance criteria are used on the criterion side. In the present study, on the predictor side were the five factors of two separate personality inventories and the 22 facets of the T-SD, as well as an overall intelligence score and its three sub-tests, education, gender, age and language. On the criterion side, in addition to an overall leadership performance score, there were two task and two contextual criteria and, when combined within their construct, a single score to represent each of the task and contextual performance domains.

Most research examines leadership that could be described as indirect leadership, that is, leading organizations. In this thesis, the effects of personality on a direct, face-to-face leadership role in well-controlled leadership situation were examined. Indeed, there is a dearth of research in this area yet it could be argued that leadership is mostly about leading people.

The T-SD was developed by Ray Christal of Tupes and Christal fame who are credited with the first observance of the Big Five personality factors. This instrument enjoys limited use only in the militaries of a few nations. This study presents a unique opportunity to examine the convergent validity of the T-SD with another well-researched personality measure, the IPIP 50 item marker test.

In summary, in the present thesis the incremental validity of personality over traditional job predictors (notably intelligence), within a direct leadership role was examined. Furthermore, both task and contextual aspects of performance were examined, under maximal performance conditions.

Hypotheses

Based on the literature reviewed above, several hypotheses were suggested. O'Keefe's (1998) research suggested that not all Big Five measures were equally good at predicting job and training performance in the CF. However, one would expect two valid measures of the Big Five to be similar in their ability to predict job performance, especially at the factor level. This would be so because if the factors are truly universal, any measure specifically designed to assess these factors, notwithstanding the items may be different, should reveal quite similar factors (John, 1990). Furthermore, there is quite a strong consensus about what the factors actually are and what they measure.

Accordingly, it was hypothesized that:

1. *Individual's factor scores between two Big-Five personality measures will be strongly correlated.*

Most of the literature suggests that personality measures are orthogonal to general intelligence and that personality measurement can add incrementally to other selection

measures (Collis & Elshaw, 1998; Salgado, 1998), therefore, the second hypothesis was that:

2. *Personality, as measured by a Big Five instrument, will show incremental validity in predicting job performance over that measured by general cognitive ability (GCA).*

Work performance is conceptualized as being comprised of task-based and contextual-based aspects (Borman & Motowidlo, 1993). Task-based performance is related to procedural knowledge, how to do the task, while contextual-based performance is related to personal attributes. Accordingly, the next two hypotheses were:

3. *General cognitive ability will show a stronger relationship with task performance than will personality.*
4. *Personality will show a stronger relationship with contextual performance than will general cognitive ability.*

The Big Five factors are comprised of a variety of facets, which are conceived of as lower-order personality traits. There is on-going controversy about which level of analysis is best for predicting performance, factor or facet, however, it is hypothesized that prediction will be superior using the factor level if one is trying to predict overall performance (Hogan & Roberts, 1996) and stronger using the facet level if one is trying to predict more discrete aspects of the performance domain (Tett, Steele, & Beauregard, 2003). Accordingly, it was hypothesized that:

5. *Overall leadership performance will be better predicted by broad personality factors than by their more narrow facets.*

6. *Discrete aspects of the performance domain will be better predicted by more specific facets than by broad factors.*

While the literature suggests that personality measures are orthogonal to general intelligence (Collis & Elshaw, 1998; McHenry, et. al., 1990), some research suggests that the openness factor is related to general cognitive ability (“g”) (Ackerman & Heggstad, 1997; Kyllonen, 1997). Hunter and Hunter (1984) have demonstrated that “g” is the best overall predictor of job performance, and Northouse (1997) suggests that intelligence is the best overall predictor of leadership. If these statements hold true, and if openness were related to “g”, then we would expect to see a relationship between high scores on openness and high leadership performance, at least with regard to task performance. The final hypotheses, therefore, were:

7. *The Openness factor will show a positive correlation with general intelligence.*
8. *The Openness factor will show a positive relationship with leadership task performance.*

METHOD

Participants

The participants came from a variety of sources; applicants to the CF who were at various stages of being processed for enrolment, new officer enrollees, and currently serving members. Applicants (N= 498) information was collected from five Canadian Forces Recruiting Centres (CFRCs) across Canada; Calgary, Ottawa, Hamilton, Quebec City and Montreal. These data represent the unrestricted range of predictor scores against which to compare the predictor data in the following studies. Experiment 1 (N=200)

involved military students attending the Basic Officer training course in St Jean Quebec. Experiment 2 (N= 118) involved military students attending junior leadership courses which are taught at six locations across Canada: Halifax NS; Aldershot NB; Quebec City QC; Borden ON; Wainright AB; and Victoria BC.

Applicants to the CF come from all regions of Canada and include both official languages. Applicants who are accepted to the CF go on to basic military training that, in the case of officers, includes leadership training. The students on the junior leadership courses are serving members of the CF who have developed in their careers to the point that they require formal leadership training prior to assuming direct leadership positions.

Predictor Measures

Trait – Self Descriptor (T-SD). The T-SD was used to assess personality traits among the participants. The T-SD was developed by the US Air Force at the Armstrong Laboratories, San Antonio, Texas by Christal (1993) following the work of Tupes and Christal (1961), which is generally regarded as the first instance of the Big Five (Collis & Elshaw, 1998). The T-SD is a self-report questionnaire that contains 64 statements (rated from 1 to 9) and 99 adjectives (rated 1 to 7) that respondents score according to how they believe the trait normally applies to them. The T-SD measures the big five personality factors and 22 subordinate facets. It is available in French and English. Currently the T-SD enjoys limited use within the militaries of five nations belonging to The Technical Cooperation Program (TTCP); USA, UK, Australia, New Zealand, and Canada. It is because of Canada's involvement in this program that the present researcher was allowed access to this personality questionnaire.

International Personality Item Pool (IPIP) 50 item marker test. The IPIP 50 was used as a second measure of personality traits among the participants. The International Personality Item Pool is an “international effort to develop and continually refine a set of personality inventories, whose items are in the public domain, and whose scales can be used for both scientific and commercial purposes”(Goldberg, 1998). Resident on the IPIP internet site is a large number of personality scales, instruments, and importantly, the results of collaborative personality research from scientists in various parts of the world. It is a public domain site and researchers are encouraged to use the IPIP questionnaires to further the scientific knowledge in this area. The present research used the 50-item Big Five marker questionnaire (Goldberg, personal communication), another self-report questionnaire comprised of 10 items for each of the five factors⁶. This questionnaire compares favourably with other well-known instruments, for example, the NEO-PI, 16PF and the CPI (see http://ipip.ori.org/ipip/new_home.htm, Multiple Constructs, for these and more comparisons).

Canadian Forces Aptitude Test (CFAT). The CFAT is a 45-minute, 60 item test used for selection and classification of both officers and non-commissioned members of the CF. The CFAT measures verbal, quantitative and spatial abilities, and the total score is used as a measure of general cognitive ability. The CFAT has separate French and English norms, and it is validated against performance on initial military occupational training. Where CFAT scores were not available because of the length of time a participant has served in the CF (the CFAT was introduced in 1996) General Classification (GC) test scores were used. The GC test was the cognitive test in use

⁶ For this study, an official Government of Canada approved translator translated the IPIP 50 into French, following which a Francophone military psychologist verified the translation.

before the CFAT, and the CFAT was developed partly from this test. The GC was very similar to the CFAT except that it was comprised of 80 items. Correlations between CFAT and GC range from 0.673 to 0.758: for all Anglophones $r = 0.758$ ($n = 22668$), Anglophone Officers $r = 0.733$ ($n = 2553$), Anglophone NCMs $r = 0.742$ ($n = 20069$), all Francophones $r = 0.694$ ($n = 8227$), Francophone Officers $r = 0.724$ ($n = 953$), and Francophone NCMs $r = 0.673$ ($n = 7270$). All correlations are significant at $p < 0.01$. (Donohue, 2006). Because the results of these two tests are present in the combined sample of participants, percentile scores were used for analyses.

Biodata. A variety of biographical information is collected from CF applicants as a routine part of the application process. Examples are age, gender, education level, first official language (FOL), rural/urban upbringing, participation on school teams, work experience, leadership experiences, and participation in organized youth groups (e.g., Cadet movement). The biodata variables included in the subsequent analyses in this dissertation are age, gender, education level, and FOL.

Criterion Measures

The criteria used were student performance on CF courses that both teach and assess leadership at two rank levels, initial officer course (called initial assessment period/ basic officer training program or IAP/BOTP), and junior leadership course (called primary leadership qualification or PLQ). Both of these courses are designed to impart the skills necessary to prepare individuals to assume initial direct leadership positions, for example; “The Primary Leadership Qualification (PLQ) is based on the current non-commissioned members general specification (NCMGS) and is designed to provide Junior NCOs with the necessary skills and knowledge to effectively lead personnel”.

(Ref. Primary Leadership Qualification Guidance (Draft). (2003). ADM (HR-Mil) INSTRUCTION). These courses provide, among other things, classroom-based instruction on the methods and theory of leadership followed by the opportunity to practice the new skills in realistic military settings. Practice and assessment sessions, called leadership “stands”, reflect real life military situations. Students are assessed as they execute a task that has multiple phases and that takes approximately four hours from receiving instructions on the task to completion. Instructors who had been trained and calibrated to assess the students’ progress and performance formally assess students over the duration of the leadership stands using standardized assessment protocols. The leadership portions of these assessment instruments are shown at Appendix A. Note that each form provides space for four separate performance scores plus an overall score. Moreover, when combined in pairs, the four assessment factors represent task and contextual performance, yielding in total seven possible performance scores.

Procedures

Depending on the participants language of choice, English or French personality questionnaires, developed using Teleform (scanable response sheets) were distributed directly to participants by either a clerk at a recruiting center, the present researcher (experiment 1), or an administrator on a leadership course (experiment 2). Participants returned the questionnaires directly back to the same person for forwarding to the researcher. On return to the researcher, questionnaires were scanned and a SPSS database was created. The resulting data set was merged with data held at the CF Directorate Of Human Resources Research and Evaluation (DHRRE) in Ottawa to include bio-data and previous cognitive test scores.

For experiment 1, the results of the participants' performance on leadership tasks were forwarded to the researcher following completion of IAP/BOTP (basic officer training). These results were matched with the participants' results on the two personality questionnaires as well as with bio-data extracted from the DHRRE database. Bio-data included age, gender, education level, CFAT score and first official language. Once the matching was complete, personal identifying information was removed from the final database. Experiment 2 was essentially the same except that the criteria are from the PLQ schools on individuals with many years of CF experience.

After preliminary analysis of the two experimental groups as described above, it was determined that the sample sizes were lower than desired. Consequently, the two experimental groups were combined on the relevant experimental variables and are presented as a third combined group.

Prior to conducting the primary analyses (multiple regressions), the number of T-SD facets (traits) was reduced to one for each factor to decrease the number of variables in the multiple regressions, and to avoid capitalizing on chance finding with 22 facets. Five sets of facets were created and selection occurred in five separate ways. The first method involved selecting facets from the literature that had been previously linked to leadership performance and that fit into the big five factors. This method involved a survey of the relevant leadership-trait research through a psychlit database. Traits were chosen based on frequency of reporting of observed leadership-trait relationships. The second and third methods utilized a group of seven military psychologists and Defence Scientists to select two sets of facets. The raters were provided with definitions of the factors and facets, as well as a description of a leadership task (Appendix B). They were

then asked to (a) identify one facet from each factor that they thought most represented its larger factor, and subsequently, to (b) indicate those facets they thought would best predict successful outcome of the leadership task. The fourth method of facet selection involved choosing those facets with the highest loading on their factor in a principal component analysis of the full data set. Finally, facets were chosen from each factor based on their correlations with the overall performance score. Since these correlations were computed between overall performance and the facets for each group, this latter method generated a different set of facets for each of the experimental groups. Each of the five sets of facets were used separately in a series of multiple regressions with each group.

Additionally, a compound personality trait was created based on guidance from the literature (Ones, Viswesvaran, & Dilchert, 2005; Mount, Barrick, & Stewart, 1978) and is comprised of the factors agreeableness, conscientiousness, and Emotional Stability (the positive side of neuroticism), which has been labelled ACE. This compound factor is also called “factor alpha” by Digman (1997), and represents what is considered to be a higher order factor of the Big Five. It is comprised of traits that refer to an individual’s ability to “get along”. Dingmans’ second higher order factor comprised of Extraversion and openness is called “factor beta”, and refers to the ability to “get ahead”. The ACE compound comprises the factors that been shown to be the most important ones, ...“in situations where teamwork is critical ...” (Mount, Barrick, & Stewart, 1978, p.162). The variable ACE was created by first centering the scores for agreeableness, conscientiousness, and extraversion by subtracting the mean from each score, and then obtaining the product of the centered scores (Spinner, 2004).

RESULTS

Data Analyses Strategy

Preceding data analyses, a series of data screening procedures were employed to examine for missing data, out of range values, estimate means and check other aspects of the data such as skewness and kurtosis, generally following the recommendations of Tabachnick and Fidell (1989). Additionally, before the specific hypotheses were tested, a number of maintenance procedures were conducted. The factor structure of the personality inventories was examined, as were their reliabilities, and the T-SD norms were compared with existing norms from the testing manual. Furthermore, in preparation for the series of multiple regressions (MR) to follow, it was necessary to reduce the size of the variables list to meet the assumptions of the MRs (Tabachnick & Fidell, 1989). This was accomplished primarily by an examination of the correlation matrices and factor analyses to identify redundant measures. Following the reporting and description of the common analyses, the hypotheses proposed previously are addressed in turn.

Data Screening Procedures

The variables of primary interest are those variables that will contribute to answering the hypotheses proposed earlier; the personality factors and facets from the T-SD and the IPIP, a measure of cognitive ability, and the set of criteria obtained from the leadership training schools. The other variables in this dataset are of tangential interest only and, therefore, received little attention beyond description unless they had a direct impact on the variables or questions of interest.

Missing values analysis was used to determine the pattern of missing values, calculate means and standard deviations and identify extreme scores. For the IPIP,

missing values did not exceed 2.8% for any factor, however, the T-SD shows up to 15.4% of values missing. This is puzzling since the tests were administered simultaneously. There are two possible explanations for this. The IPIP is a 50-item instrument and the T-SD is a 163-item instrument and, since participation was voluntary and participants could stop at any time, it is possible that some respondents simply failed to complete the longer instrument. It is also possible that respondents completed only one of the two tests given, either erroneously thinking that they had completed the task or simply chose to stop at completing one. Counting all the groups, applicants, officers and non-officers, the number of respondents who completed the T-SD and the IPIP was approximately 700 and 800 respectively. Given the large sample size, it was unlikely that a loss of 15% of the respondents for the T-SD would have any dramatic effect on the norms for this instrument. This assumption was confirmed by randomly reducing the IPIP and T-SD sample by a further 15% and comparing the means, standard deviations and ranges against the full data set. The largest mean difference observed was less than one full point, and the SD and range of scores were similarly close to the full data set scores, confirming the earlier assumption that 15% missing values for these large datasets has no appreciable effect. Furthermore, the IPIP scores of the group of participants who completed the T-SD were compared with those who did not and no differences were found.

Examination of the boxplots for all the variables of interest indicated that there were some outliers located greater than three standard deviations from the mean. The percentage of outliers for each predictor was very low, less than 3%, which could be either extreme scores within the population, or error. It is impossible to determine if

extreme scores on the personality variables are error or if they are intentional on the part of the respondents to convey personality relevant information. For example, an extremely high score on conscientiousness may in fact be the respondents' true reflection of how much they believe themselves to be conscientious. Consequently, extreme personality scores were not removed from analyses.

There were no extreme scores in the general cognitive ability (GCA) measure and there were no extremely high scores in the criterion measures, but there were extreme low criterion scores. The low criterion scores observed most likely reflect the true scores given to the students by the assessors, reflecting the valid assessment of the student (i.e., they in fact did not perform well on the leadership task). This is reinforced by an examination of who received the extreme low scores. Comparing the experimental groups on criterion scores shows that the new officer group (IAP⁷) have lower scores on average than do the non-officers who have much more military experience. Also, the non-officer range of scores does not include the lowest possible score but the officer group does in each of the seven criterion measures. Given that extreme scores are less than three percent, and that the extreme scores have plausible explanations and likely reflect true scores in this population, they were not removed from the analyses.

The predictor and criterion variables were examined for skewness and kurtosis. The criteria were all distributed normally. The GCA variable was negatively skewed, and many of the personality variables were also skewed, both positively and negatively. Representative predictors were transformed using log 10 and squaring, and it was found that the transformed variables had all three possible outcomes on bivariate correlations

⁷ For ease of understanding the groups membership in the analysis, hereafter IAP will be referred to as Officer, PLQ will be referred to as non-Officer. The combined group is the mix of these two groups.

between the transformed variables and the criteria (i.e., there was no effect, correlations were higher, or the correlations were reduced compared to the untransformed variables). There are good reasons to expect ability tests to be distributed normally (e.g., cognitive ability), however, self-reported personality tests are not ability tests and other distributions should be expected. For example, asking people if they thought they were generally fair in their dealings with others would likely generate a negatively skewed distribution that, in context, would be normal (i.e., most people would admit to dealing fairly with other people). Thus it is likely that there is a meaningful distribution in the personality predictor scores. It is quite probable that skewed scores accurately reflect what the respondents are trying to convey regarding the self-description of their personality. Consequently, even though some of the predictors were skewed, the remainder of the analyses were conducted using the original untransformed variables.

Gender and Language

With one exception, there were no gender or language differences on the T-SD or the IPIP for the overall sample or for any of the experimental groups. The one exception was a gender difference in the openness factor of the T-SD with the officer sample $F(1, 157) = 4.40, p < .05$, with the females mean score being higher than the males; 142 vs. 131. The number of women in this sample was, however, quite low ($n=22$) and, therefore, caution is warranted with regard to this difference since it does not have sufficient power to generate a meaningful or stable result.

With regard to GCA, differences were found between males and females on this measure; $F(1, 763) = 8.2, p < .01$, with the males ($M = 57.8, SD = 27.54$) scoring almost 8 percentage points higher than the females ($M = 50.13, SD = 27.54$). However, there are

significantly more males than females in the sample (643 vs. 126) and, therefore, the female GCA score is less reliable than the male. Notwithstanding the possible instability of the females' scores, and the fact that the difference is about one-third of a standard deviation, an eight point difference is not trivial. However, this difference does not have a direct effect on the MRs since, as will be seen, GCA and gender are controlled for by being entered on the first step of the MRs to follow.

There were no language differences observed on any of the seven performance measures. There was one gender difference found with one of the task measures (Leader expressed accurate goals of the task and expected results) $F(1, 205), p < .05$, with males scoring slightly higher than females on this outcome, 3.43 vs. 3.07.

Since there were no language differences observed in any of the relevant variables, language is not discussed further. To control for any possible effects of the gender differences noted above, gender was entered as the first step in the subsequent multiple regressions, along with GCA.

Demographic Characteristics of the Overall Sample

Demographic characteristics of the experimental groups are shown at Table 1. Of the 816 respondents in the sample, 83.6% were male and 16.4% were female (current CF proportions are 87% male and 13% female). The mean age of the overall sample was 33 years ($SD = 6.5$) with a range of 19 to 51 years, and the sample was comprised of 52.4% Anglophones and 47.6% Francophones (current CF proportions are 72% Anglo and 28% Franco). Because the GCA measures were different for some participants as discussed previously, percentile scores were used to represent them⁸. The

⁸ There were 76 participants who had been tested with both the GC test and the CFAT and the correlation between the GC and the CFAT with this group was highly significant ($r = .58, p < .001$).

mean GCA percentile score of the sample was 56.56 ($SD=27.7$) with a median of 59 and a range of 0-99. The percentile score of 0 appears in this range because many of the participants, those at recruiting centers, were still at the applicant stage to the CF and not enrolees or serving members. The CF uses a multiple-hurdle selection model and the CFAT is one of the preliminary hurdles to enrolment. For non-officer applicants, the CFAT enrolment cut-off score is at the 10th percentile and for officers the cut-off is at the 25th percentile, thus, for the various experimental groups for which there is criterion data, their CFAT range will be restricted to scores above these cut-offs.

Table 1

Demographic Characteristics of the Full Sample and Sub-samples

Variable	Full Sample			CFRC			Officer			Non-Officer			Combined Group		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Age ^a	219	1970 ^c	6.5	42	1972	7.7	68	1975	5.2	109	1967	4.9	177	1970	6.2
GCA	771	56.5	27.7	472	56.4	26.9	185	58.9	27.5	114	53.1	30.5	299	56.7	28.8
Educ ^b	99	2.16	.91	18	1.55	.78	69	2.44	.84	12	1.41	.51	81	2.29	.88
Language		E	F		E	F		E	F		E	F		E	F
	675	354	321	472	187	285	180	150	30	23	17	6	203	167	36
	%	52.4	47.6	%	39.6	60.4	%	83.3	16.7	%	73.9	26.1	%	82.3	17.7
Gender		M	F		M	F		M	F		M	F		M	F
	769	643	126	474	400	74	185	155	30	110	88	22	295	243	52
	%	83.6	16.4	%	84.4	15.6	%	83.8	16.2	%	80	20	%	82.4	17.6

a. Age is reflected by birth year.

b. Education is coded (1) secondary school, (2) post-secondary (non-university) and, (3) university.

c. Data were collected Fall/Winter 2003

Formal level of education attained was coded as: (1) secondary school, (2) post-secondary (non-university) and, (3) university. The mean formal education attainment of the overall sample was greater than secondary school but less than university completion ($M = 2.16$, $SD = .91$). As would be expected however, there is great variation between the groups ($F(2, 96) = 14.59$, $p < .001$) with the officer group possessing higher educational qualifications. Since officers in the CF must be in possession of a degree before commissioning, and there are a number of programs available to assist officer applicants to obtain a degree if they do not already have one, this is simply a fact of this group membership.

Normative Scores for the Personality Predictor Measures

The big-five factor scores between the two personality measures, the IPIP and the T-SD, are presented in Table 2. Included in this table for comparison purposes are the factor scores from the T-SD testing manual (Collis, 1997). As can be seen in Table 2, the norms for the personality factors for the present sample are quite similar in general pattern to previously reported norms. Beyond examining the general pattern of norms, however, no attempt was made to compare these groups since norms should be constructed for the population for which they are used and other norms would not be directly comparable.

Table 2

Factor Scores for the Personality Measures – Full Sample

	T-SD Present Sample	IPIP Present Sample	T-SD UK Navy Officer Applicants	T-SD UK Navy Officers in Training	T-SD USAF Officer Training Plan	T-SD USAF Enlisted (non- officers)
Neuroticism	112.83 SD=31.7 N=690	3.85 SD= .624 N=793	127 SD=28 N=641	124 SD=28 N=508	116 SD=30 N=440	126 SD=34 N=415
Extraversion	22.17 SD=27.2 N=702	3.44 SD= .699 N=794	32 SD=21 N=641	27 SD=22 N=508	22 SD=29 N=440	24 SD=29 N=415
Openness	136.53 SD=24.4 N=720	3.82 SD= .528 N=795	119 SD=21 N=641	119 SD=20 N=508	126 SD=22 N=440	130 SD=25 N=415
Agreeableness	158.37 SD=23.4 N=704	3.97 SD= .509 N=794	152 SD=21 N=641	154 SD=22 N=508	148 SD=26 N=440	164 SD=24 N=415
Conscientiousness	168.30 SD=17.7 N=712	3.97 SD= .542 N=793	158 SD=18 N=641	155 SD=18 N=508	156 SD=17 N=440	162 SD=21 N=415

The normative scores for the 22 facets of the T-SD are shown in Table 3. Facets were still considered experimental by Ray Christal (Collis, 1997⁹), consequently there are no norms available on facets with which to compare the present pattern of results. With correction for rounding taken into account, the facet scores correctly sum to their factor score except for agreeableness. In calculating the agreeableness factor, all the items of this factor are used, however, when calculating the facets that comprise the factor, not all the items are used. Consequently the facet scores for agreeableness do not sum to the

⁹ Dr. Jan Collis from the University of Plymouth worked with Dr Ray Christal at the Air Force Human Resources Lab (Armstrong Lab) in San Antonio, and her statement in the T-SD testing manual about the experimental nature of facets was presumably first hand knowledge.

factor score. When the un-used agreeableness items are scored and treated *as if* they were a 6th facet, however, the facet scores do sum to the factor score.

Table 3

Facet Scores for the T-SD

Factor and Facets	N	Mean	S.D.
Neuroticism (Emotional Stability)			
N1: Nervous and Stressed	756	43.9	14.0
N2: Worrying	775	25.9	8.4
N3: Irritable	761	28.1	8.7
N4: Envious and Jealous	775	14.9	5.5
Extraversion			
E1: Shy and Bashful	761	-38.1	12.8
E2: Talkative	785	26.9	5.8
E3: Socially Active	784	24.4	5.1
E4: Assertive	783	12.4	3.5
E5: Unsociable	770	-3.3	5.6
Openness			
O1: Philosophical	757	45.7	10.2
O2: Scientific Interest	781	30.7	7.6
O3: Creative	798	26.4	4.3
O4: Reflective	773	23.2	5.4
O5: Cultured	792	10.2	3.9
Agreeableness			
A1: Friendly	787	28.5	3.5
A2: Considerate	787	27.3	4.1
A3: Cold and Insensitive	791	-14.6	6.0
A4: Helpful	793	22.7	3.2
A5: Warm and Sympathetic	791	43.2	5.6
Conscientiousness			
C1: Efficient/ Dependable	765	72.8	7.8
C2: Hard-Working	782	46.2	5.0
C3: Organized	773	49.0	7.6

Principal Component Analyses

Principal component analyses were conducted on the full data set (N=816) for the T-SD and the IPIP, with Varimax rotation and a five-factor solution requested. The results for the T-SD are shown in Table 4. Bartlett's test of sphericity ($X^2 = 8425.31$, $df = 231$, $p < .001$) shows that the correlations between the 22 facets were statistically different from zero, and the Kaiser-Meyer-Olkin (KMO) value of .86 suggested that the data were suitable to be used in principal component analysis. (Friel, 2006). As can be seen in Table 4, the T-SD five-factor solution shows the facets loading on their appropriate factors, and accounting for 69.3% of the variance. None of the items on the five factors loaded higher than .40 on the other factors, and were generally well below .2, supporting the homogeneity of the separate factor scales (Nunnally & Bernstein, 1994)¹⁰.

Similarly for the IPIP (Table 5), all the items loaded on the appropriate factors accounting for 43.8% of the variance. Bartlett's test of sphericity ($X^2 = 13829.69$, $df = 1225$, $p < .001$) shows that the correlations between the 50 IPIP items were statistically different from zero, and the KMO value of .90 suggested that the data were suitable for use in principal component analysis. None of the items on the five factors loaded higher than .37 on the other factors, and were generally well below .2, supporting the homogeneity of the separate five factor scales. Within the present sample, both the T-SD and the IPIP personality inventories are represented by five distinct factors that correspond to the big five factors as they are commonly characterized. Correlations between the factors of these two instruments are shown at Table 14, and discussed at that point as they relate to that particular hypothesis.

¹⁰ Nunnally and Bernstein recommend that "most variables" should not correlate with other factors more than .3, and each factor should have some variables that correlate with the factor almost exclusively. The present FA meets these conditions.

Table 4

Principal component analysis of the T-SD - Full Sample - Rotated Component Matrix

Facet	Component (Factor)				
	1	2	3	4	5
e2 Talkative	.818	.058	.270	.080	.031
e3 Socially Active	.795	-.034	.243	-.014	.166
e1 Shy & Bashful	.772	-.403	.011	.043	.046
e5 Unsociable	.746	-.310	.239	-.115	.141
e4 Assertive	.625	-.263	-.077	.268	.307
n2 Worrying	-.282	.834	.018	.020	-.154
n1 Nervous & Stressed	-.209	.800	-.033	.007	-.308
n3 Irritable	-.090	.786	-.316	-.061	-.040
n4 Envious & Jealous	-.048	.785	-.259	-.079	-.173
a2 Considerate	-.057	-.094	.819	.113	.107
a5 Warm & Sympathetic	.205	-.088	.774	.056	.290
a4 Helpful	.159	.007	.708	.062	.228
a3 Cold & Insensitive	.183	-.369	.683	-.054	-.014
a1 Friendly	.366	-.184	.674	-.007	.170
o1 Philosophical	-.004	-.038	.050	.872	.018
o2 Scientific Interest	.075	-.050	.003	.831	-.021
o4 Reflective	-.051	.194	.126	.753	.106
o5 Cultured	.040	-.106	-.032	.704	.025
o3 Creative	.284	-.165	.130	.423	.393
c3 Organized	.099	-.083	.159	.012	.872
c1 Efficient & Dependable	.130	-.251	.244	.039	.767
c2 Hard-working	.160	-.202	.230	.083	.755

Table 5

Principal component analysis of the IPIP - Full Sample - Rotated Component Matrix

Item	Component (Factor)				
	1	2	3	4	5
IPIP6	-.743	.085	.024	-.127	-.079
IPIP21	.705	-.093	-.109	.250	.158
IPIP46	-.701	.125	.033	-.097	-.044
IPIP31	.681	-.131	-.054	.256	.086
IPIP16	-.659	.181	.154	-.057	.031
IPIP36	-.641	.078	.005	.129	-.079
IPIP41	.620	.001	.090	-.061	.245
IPIP1	.609	.004	-.056	.063	-.006
IPIP26	-.580	.142	.121	-.140	-.217
IPIP11	.542	-.211	-.039	.313	.067
IPIP39	-.063	.742	.141	-.150	-.041
IPIP44	-.084	.708	.175	-.191	-.025
IPIP34	-.024	.706	.192	-.126	.024
IPIP29	-.074	.700	.120	-.010	-.133
IPIP49	-.184	.693	.110	-.071	-.018
IPIP4	-.145	.691	.124	.040	-.132
IPIP14	-.149	.625	-.007	.087	-.113
IPIP24	-.102	.578	.282	-.031	-.106
IPIP9	.028	-.438	.104	.143	.132
IPIP19	.130	-.374	-.096	-.090	.133
IPIP8	-.046	.109	.738	-.022	.080
IPIP33	-.065	.017	-.728	.087	.037
IPIP28	-.032	.176	.712	-.051	.047
IPIP3	.125	-.113	-.624	-.023	.097
IPIP23	.039	-.074	-.568	.064	-.036
IPIP48	.084	-.051	-.545	.085	.215
IPIP13	.129	-.146	-.544	.067	.200
IPIP43	.028	.010	-.540	.116	.040
IPIP38	-.021	.297	.477	-.177	-.099
IPIP18	-.120	.296	.465	-.166	-.066
IPIP17	.023	.061	-.088	.763	.082
IPIP27	-.035	.078	.079	.632	-.065
IPIP37	.130	-.070	-.135	.627	.056
IPIP32	-.318	.217	.157	-.603	-.027
IPIP22	-.164	.093	.131	-.585	-.097
IPIP42	.121	.115	-.068	.575	.201
IPIP7	.376	-.086	-.114	.544	.110
IPIP2	-.064	.192	.083	-.441	-.063
IPIP12	.109	.248	.327	-.411	.098
IPIP47	.353	-.153	-.118	.371	.103
IPIP40	.076	-.040	.051	-.145	.604
IPIP15	.097	.048	.007	.133	.599
IPIP30	-.146	.083	.095	-.121	-.590
IPIP25	.268	-.084	-.188	.120	.588
IPIP50	.333	-.109	-.126	.141	.583
IPIP45	-.160	.118	-.015	.161	.568
IPIP5	.105	-.133	-.063	-.039	.567
IPIP10	-.016	.314	.051	-.006	-.559
IPIP20	.014	.166	-.028	-.124	-.525
IPIP35	.177	-.270	-.177	-.030	.505

Pooling the Groups

Due to the small sample sizes for the officer and non-officer groups, it was deemed desirable to combine the groups into one larger group for additional analyses if it was possible to do so. In considering combining the two sub-groups into a larger group, it was first necessary to assess the degree to which these groups were poolable, that is, did they differ significantly on the predictor variables. Means tests with the GCA variable and the personality variables indicated that one of the T-SD factors, conscientiousness, was significantly different between the officer and the non-Officer groups ($F(1, 273) = 28.18, p < .001$), with the officers ($M = 175.12, SD = 16.2$) scoring higher than the non-officers ($M = 161.44, SD = 19.2$). Furthermore, six of the 22 facets also showed significantly different scores between the groups (e1, o1, o3, o4, c1 and c3). Given the fact that 21 of 28 comparisons yielded no significant differences between groups on the predictor measures, it was deemed reasonable to combine these groups into one larger group for analyses.

As well, the T-SD and the IPIP both have a verbal component to them and it is assumed that respondents will understand the trait words presented and make attributions about themselves based on their comprehension of the trait items. It follows that some respondents may interpret the words differently, resulting in variation not related to personality, but to vocabulary. If this was the case, differences in mean scores on the predictors between groups that have been divided on verbal ability should be observed. Two groups were created, based on the lower third and the higher third of scores for the vocabulary sub-test of the CFAT. The mean factor scores for both personality instruments based on these two groups were then compared. Except for the neuroticism scale from the IPIP, $F(1, 446) = 5.047, p < .05$, the results of these analyses were non-

significant for all other factors. The 22 T-SD facet means were also compared by highest and lowest verbal score, and differences were only found with n4 (envious and jealous) $F(1, 433) = 10.41, p < .001$ and a2 (considerate) $F(1, 444) = 4.58, p < .05$. Thus, while there were statistical differences observed for one factor and two facets in this analysis out of 32 comparisons, it is reasonable to conclude that verbal aptitude did not profoundly influence the outcome of the personality measures with this population. That is, those participants who represent the lower end of verbal ability did not differ significantly from those in the higher end in how they completed the inventories.

Reliability Analyses

Factors. Internal consistency reliabilities (Cronbach's Alpha) for the T-SD factors and facets as well as the IPIP factors were calculated for the full sample and for each of the sub-samples. Reliabilities for the T-SD were calculated using standardized scores because the T-SD trait words are scored with a nine-point scale and the T-SD sentences are scored with a seven-point scale but both sets of scores are used in the final calculation (however, see note in Table 6). Table 6 shows the reliabilities for the full sample. The reliabilities for the factors for both personality instruments are very strong, ranging between .79 and .87 for the IPIP and between .89 and .94 for the T-SD. The IPIP reliabilities are noticeably lower than those for the T-SD, however, the IPIP also contains many fewer items per factor.

Table 6

Internal Reliabilities (Cronbach's alpha) of the IPIP and the T-SD Factors – Full Sample

	IPIP Factors	No. of items	T-SD Factors	No. of items	T-SD Factors
N	.848	10	.941	38	.937
E	.872	10	.928	30	.927
O	.794	10	.899	29	.895
A	.800	10	.939	35	.933
C	.826	10	.925	31	.922

Note: For comparison purposes, the final column represents the reliabilities based on re-coded raw scores for the T-SD not standardized scores. There does not appear to be any substantial differences between calculating the reliabilities with standard scores or raw scores even though the scale is not consistent.

For the separate groups, the reliabilities for the T-SD and the IPIP factors are shown in Table 7. Even when the size of the sample dropped to as low as 109 respondents, as in the non-officer sample, the reliabilities remained above .87 for the T-SD and above .79 for the IPIP.

Table 7

Internal Reliabilities (Cronbach's alpha) for the T-SD and IPIP Factors for Experimental Groups

Factor	N of Items	CFRC Sample (N=417)	Officer Sample (N=171)	Non-Officer Sample (N=109)	Combined Sample (N= 297)
T-SD Neuroticism	38	.94	.94	.93	.93
T-SD Extraversion	30	.93	.91	.93	.92
T-SD Openness	29	.91	.88	.87	.88
T-SD Agreeableness	35	.94	.92	.94	.93
T-SD Conscientiousness	31	.92	.92	.92	.92
IPIP Neuroticism	10	.81	.87	.88	.88
IPIP Extraversion	10	.86	.88	.89	.88
IPIP Openness	10	.79	.77	.80	.79
IPIP Agreeableness	10	.79	.81	.79	.80
IPIP Conscientiousness	10	.81	.85	.81	.84

Facets. Reliabilities for the T-SD facets for the full sample and the experimental groups are shown at Table 8. The assertiveness facet in the extraversion factor is consistently the lowest reliability score, averaging about .50, and the nervousness facet of

the neuroticism factor is consistently the highest, with an average of about .89. In general, the reliabilities of the facets were acceptable, especially given that many of the facets are comprised of so few items.

Table 8

Reliabilities (Cronbach's alpha) for the T-SD Facets – Full Sample and Experimental Groups

Facet	N of Items	Full Sample (N=816)	CFRC Sample (N=417)	Officer Sample (N=171)	Non-Officer Sample (N=109)	Combined Sample (N= 297)
N1 nervous	16	.90	.90	.89	.89	.89
N2 worrying	8	.80	.81	.79	.78	.78
N3 irritable	8	.79	.78	.79	.81	.80
N4 envious	5	.73	.74	.72	.71	.71
E1 Shy & Bashful	10	.87	.88	.86	.88	.87
E2 Talkative	5	.75	.76	.75	.75	.75
E3 Socially Active	5	.77	.78	.72	.81	.75
E4 Assertive	4	.50	.51	.49	.51	.50
E5 Unsociable	5	.78	.79	.77	.78	.77
O1 Philosophical	10	.79	.80	.77	.77	.77
O2 Scientific Interest	7	.76	.77	.77	.72	.75
O3 Creative	4	.82	.82	.80	.83	.81
O4 Reflective	5	.67	.68	.66	.63	.65
O5 Cultured	3	.66	.68	.61	.63	.62
A1 Friendly	5	.79	.79	.74	.83	.78
A2 Considerate	5	.79	.81	.77	.72	.76
A3 Cold & Insensitive	5	.73	.74	.72	.73	.72
A4 Helpful	4	.76	.79	.68	.75	.71
A5 Warm/Sympathetic	6	.83	.84	.81	.82	.81
C1 Efficient & Dependable	10	.82	.82	.83	.82	.83
C2 Hard-Working	8	.79	.80	.74	.82	.77
C3 Organized	8	.85	.86	.85	.86	.85

Correlational Analyses

As a precursor to the multiple regressions, and to examine the relationships between the relevant predictors and criteria, correlations were computed for each of the experimental groups on the broad set of variables available, and the significant correlations are shown in Tables 9 to 11. For reference, the full correlation matrices for the full sample, the separate officer and non-officer samples, and the combined sample are contained in Appendix C.

Some of the variables reported below had very few respondents with which to conduct analyses (e.g., language in the non-Officer group, education level in the officer group). This is an artefact of matching the data sets prior to analysis. The data on the personality instruments and the criteria were collected specifically for this study, however, much of the bio-data was gleaned from a personnel database that is incomplete for a variety of reasons including its age and layout. For example, older data are stored under a person's social insurance number and the CF has in recent years moved to a CF Service number and not all the data have been converted. The age of the data also refers to its newness, since new data typically has a lag of many months until it is entered as part of the master dataset. Consequently, some of the variables have lower than desired numbers to match with the purposely-collected data, and any analyses based on these variables will be treated with caution. What follows are three tables of correlations, one for each experimental group: table nine contains the correlations for the non-officer group; Table 10 contains the correlations for the officers; and, Table 11 presents the correlations for the combined group.

Table 9

Significant Correlations between criteria and predictor and bio-data variables in non-Officer Sample

Criteria >	Leader	Inspire	Support	Standard	Context	Task	Overall
e4 assertive (n=108)			-.195*				
e5 unsociable (n=103)	-.231*		-.213*	-.236*	-.221*	-.253**	-.253**
c1 efficient & dependable (n=108)				.215*			

Note. Leader = Leader expressed accurate goals of the task and expected results; Inspire = leaders ability to direct and motivate candidates in spite of their personal concerns; Support = Directed and supported subordinates behaviors/ activities; Standard = Defined and maintained clear, measurable standards for the task; Contextual = sum of inspire and support scores; Task = sum of leader and standard scores; Overall = overall performance score, which is a sum of contextual and task scores.

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

In Table 9 for the non-Officer group, the three personality facets that correlate with the performance measures are the assertiveness facet (e4) and the unsociable facet (e5), both from the extraversion factor, and the efficient and dependable facet (c1) from the conscientiousness factor. There were no discernable patterns of correlations except that being unsociable is negatively correlated with all the performance measures save one. This is the group of experienced military members who have had exposure to leadership for a number of years either through acting in leadership positions or as direct subordinates. With regard to this negative relationship, an examination of the items comprising the unsociable facet confirms that it reflects social distancing. Representative statements include, for example, "I tend to be a loner", and "I avoid meetings and social gatherings when possible". Thus, this result suggests that some degree of sociability is associated with leadership performance, which makes sense given that leadership is very much a social enterprise.

For the officer sample shown in Table 10, again there was no clear pattern to the correlations. This group does start to show some relationship between cognitive ability and leadership performance, through two sub-tests of the CFAT; spatial ability and problem solving. The strongest correlation observed was a negative one between education level and one of the task elements, “standard” (defined and maintained clear, measurable standards for the task), however, the sample size is very small and therefore it is likely to be an unstable finding. None-the-less, the strength and direction of this correlation should be noted and is discussed further below.

With regards to the personality correlates of performance, only three facets show any significant relationship with leadership performance. The facet o4 (reflective) is negative, indicating a relationship between performance and a polar opposite of reflective, perhaps decisive. An examination of the items comprising the reflective facet suggests it is akin to meditative (e.g., I spend a lot of time analysing my inner feelings; I spend a lot of time in meditation and deep thought). From a leadership perspective, certainly the direct, face-to-face, maximal performance leadership assessed in this study, too much time spent in a reflective state would spell disaster for the leader in accomplishing his/her tasks.

The envious and jealous facet (n4) also has a negative relationship with leadership task performance, again indicating the opposite pole, such as confidence and comfort. Finally, the nervous and stressed facet (n1) from neuroticism has a positive correlation with the leadership performance measure “support” (directed and supported subordinates behaviours/ activities), indicating a relationship between stress/nervousness and the aspect of leadership that requires these new leaders-in-training to direct others.

Table 10

Significant Correlations between criteria and predictor and bio-data variables in Officer Sample

Criteria >	Leader	Inspire	Support	Standard	Context	Task	Overall
Gender (n=106)	-.250*	-.205*				-.202*	
Educ. Level (n=44)				-.336*			
Spatial Abil. (n=102)	.204*		.243*			.217*	
Problem Solving (n=102)	.202*						
o4 reflective (n=110)	-.233*					-.244*	
n4 envious & jealous (n=110)				-.212*			
n1 nervous/ stressed (n=110)			.199*				

Note. Leader = Leader expressed accurate goals of the task and expected results; Inspire = leaders ability to direct and motivate candidates in spite of their personal concerns; Support = Directed and supported subordinates behaviors/ activities; Standard = Defined and maintained clear, measurable standards for the task; Contextual = sum of inspire and support scores; Task = sum of leader and standard scores; Overall = overall performance score, which is a sum of contextual and task scores.

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

Examination of the correlations with the combined group, shown in Table 11, reveals significantly more relationships than the two groups separately. As with the officer sample, the highest correlations observed are with education level and all of the performance measures, and again the relationships were negative. Recall that the officer group has a significantly higher education level than the non-officers by virtue of the fact that officers must be in possession of a degree. Furthermore, in all performance measures (task, contextual and overall), the non-officers leadership performance scores are significantly higher than the officers (Appendix D), therefore, the negative correlation of

educational level and performance is accounted for by the differences between groups.

That is, the non-officers leadership performance was better but they have less education, and the officers leadership performance was worse while they possessed higher education.

Table 11

Significant Correlations between criteria and predictor and bio-data variables in Combined Sample

Criteria >	Leader	Inspire	Support	Standard	Context	Task	Overall
CFAT Total (n=124)	.258**		.211*		.203*	.239**	.234**
Spat Ability (n=124)						.185*	
Problem Solving (n=124)	.265**	.185*	.212*		.225*	.230*	.240**
Ed. Level (n=56)	-.292*	-.276*	-.350**	-.452**	-.366**	-.447**	-.432**
Gender (n=207)	-.146*						
Age (n=146)	-.180*	-.211*			-.168*	-.188*	-.191*
C T-SD (n=194)	-.201**		-.173*		-.167*	-.161*	-.173*
e1 shy (n=218)	-.183**					-.158*	-.145*
e3 soc. active (n=218)						-.143*	
o4 reflective (n=218)	-.204**			-.144*		-.194**	-.166**
c1 efficient & dependable (n=218)	-.184**		-.135*		-.142*	-.147*	-.153*
c3 organized (n=218)	-.135*						

Note. Leader = Leader expressed accurate goals of the task and expected results; Inspire = leaders ability to direct and motivate candidates in spite of their personal concerns; Support = Directed and supported subordinates behaviors/ activities; Standard = Defined and maintained clear, measurable standards for the task; Contextual = sum of inspire and support scores; Task = sum of leader and standard scores; Overall = overall performance score, which is a sum of contextual and task scores.

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

With regards to cognitive ability, the CFAT total score and two CFAT sub-tests show statistically significant correlations with various performance outcomes. This is completely consistent with the literature showing GCA is the best predictor of job performance across all jobs (Hunter & Hunter, 1984; Schmidt & Hunter, 1998).

Examining the relationships between personality and performance with this group, the conscientiousness factor along with a number of facets from this and other factors show significant relationships. The openness facet of reflective (o4) shows the highest correlations with the performance measures and, as in Table 10, is negative and appears only in the task elements of performance. This finding relates to hypotheses three and four and is explored more fully when these specific hypotheses are addressed below.

Contrary to what was expected, conscientiousness at both the facet and the factor level show significant negative correlations with some performance measures. It was expected that better performance would be related to high conscientiousness. In an attempt to clarify why the correlations with the conscientiousness factor and facets were negative, an analysis of the response pattern with the combined group and the criterion with the highest correlation with conscientiousness (*Leader expressed accurate goals of the task and expected results*), revealed the pattern in Table 12. As can be seen, mean scores for conscientiousness decrease as the criterion score increases; exactly what the correlation indicates is happening, and opposite to what was anticipated. A similar patterns emerges with the IPIP as well, although not as dramatically.

To explore this unexpected pattern more fully, separate analyses as above were conducted with the two original groups separately. Interestingly, the results of these

Table 12

*Response Pattern of Conscientiousness Scores
for the Leader Outcome Scores with the Combined Group*

Criteria leader	Mean score for C	N	Std. Deviation
1	177.8750	8	13.45296
2	176.4138	29	18.92564
3	167.2273	66	20.59185
4	165.8462	65	18.86484
5	164.0000	26	13.94848
Total	168.1443	194	19.05595

analyses yielded two different patterns as shown in Table 13. In the officer group, the pattern of conscientiousness scores was as seen in the combined group, that is, conscientiousness scores decrease as performance scores increase, with the exception of the one person who achieved a performance score of five. In the non-Officer group, however, the opposite is true; conscientiousness scores increase as performance scores increase, which was the expected pattern.

It is apparent from these analyses that the officer group is influencing the relationship of conscientiousness with the criteria in the combined group, although it is not clear why this reverse pattern should exist with this group. Furthermore, the almost perfectly linear pattern of responses indicated that something else might be happening. A re-check of the original data confirmed that the working dataset was correct. As previously reported, the non-officer group has significantly lower mean conscientiousness scores than the officer group (161 vs. 175 respectively). Beyond a certain level, therefore, it is possible that too much conscientiousness may be detrimental. That is, it is possible that conscientiousness has a curvilinear relationship with performance. To check this possibility, linearity was assessed in accordance with

Tabachnick and Fidell (1989). The bivariate scatterplots and the residual plots were examined for conscientiousness with “leader”, the variables with the highest negative correlation, and no evidence of non-linearity was found. This somewhat unique finding of a negative relationship with conscientiousness and performance is explored later in the discussion.

Table 13

Response Pattern of Conscientiousness (C) Scores
for the Leader Criterion - Officer and the non-Officer Groups

Criteria Leader	Mean Scores for C (Officer)	N	Std. Deviation	Mean Scores for C (non- Officer)	N	Std. Deviation
1	177.8750	8	13.45296	No criteria scores of 1 in this group		
2	177.9259	27	18.61126	156.0000	2	11.31371
3	174.2632	38	15.13843	157.6786	28	23.29211
4	171.6667	21	16.38699	163.0682	44	19.50241
5	183.0000	1	.	163.2400	25	13.67565
Total	175.1263	95	16.22202	161.4444	99	19.23868

Returning to an examination of Table 11, the extraversion facets show puzzling relationships, both with the criteria and among themselves. The facets e1(shy) and e3 (socially active) both correlate with leader, task performance, and overall performance, and they are both in the same negative direction. It would be expected that these facets would show opposite relationships with the criteria since they reflect quite opposite traits (Can one be both shy and socially active?). This result is similar to the previous positive correlation between nervousness and performance (i.e., it is counter intuitive).

Neither neuroticism nor agreeableness correlated at either the factor or the facet level with the criteria in the combined group. With regard to neuroticism, this is somewhat surprising because it was speculated that a high degree of emotional stability

would be necessary to complete these stressful courses. However, criterion data on those who failed training is not available, and Neuroticism/ Emotional Stability may actually be more evident in a group of failures than in those people who passed these courses.

Agreeableness was also expected to be correlated with some aspects of performance, especially the contextual elements, since getting along in a group task would seem to be an essential skill.

As previously stated, following the examination and reporting of the common results above, the specific hypotheses would be addressed in turn. The next section aims to accomplish this objective.

Addressing the Hypotheses

Hypothesis 1: Individuals factor scores on the T-SD will be strongly related to their factor scores on the IPIP.

This hypothesis speaks to the convergent validity of the two personality instruments and was strongly supported. Pearson product-moment correlations for the relevant predictor and criterion variables in the study were computed and examined. Of particular interest in these analyses were the correlations between the IPIP and the T-SD. Table 14 shows the correlation coefficients for the full sample and the sub-samples on the T-SD and the IPIP factors.

The correlations between the IPIP and the T-SD factors for the full sample (first row) clearly indicate a strong relationship between these two instruments, with the smallest correlation between the openness factor ($r = .692$) and an average correlation of $r = .77$. It is clear that there is a very strong relationship between the T-SD Factors and the IPIP factors. These relationships remain equally robust for the sub-groups as well. It is evident that both the T-SD and the IPIP are measuring the same underlying constructs

at the factor level. This relationship could not be examined at the facet level because facets are not available in the IPIP marker test.

Table 14

Correlations Between the IPIP and the T-SD Factors – Experimental Groups

Sample	N	E	O	A	C
Full Sample	-.828** ^a (N=677)	.871 (N=689)	.692 (N=708)	.721 (N=691)	.763 (N=696)
CFRC	-.836 (N=402)	.880 (N=407)	.701 (N=420)	.706 (N=415)	.779 (N=413)
Officer	-.789 (N=158)	.836 (N=160)	.666 (N=162)	.763 (N=160)	.688 (N=159)
non-Officer	-.845 (N=98)	.890 (N=103)	.695 (N=106)	.690 (N=98)	.803 (N=103)
Combined Group	-.809 (N=263)	.860 (N=270)	.685 (N=277)	.753 (N=266)	.734 (N=270)

** All correlations significant at $p < .01$

a. Direction of the sign is irrelevant because one represents the reverse of neuroticism; emotional stability.

Hypothesis 2. *Personality, as measured by a Big Five instrument, namely the T-SD and the IPIP 50, will show incremental validity in predicting job performance over that measured by general cognitive ability (GCA).*

This hypothesis relates to the main research question regarding the efficacy of personality to add to the prediction of leadership work behavior. This hypothesis was supported (Tables 15 and 16). These two tables summarize the main results from the series of multiple regressions (which, for reference, are fully shown in Appendix G), and show that different levels (factor versus facet) and various traits of personality increment cognitive ability in predicting leadership performance.

Table 15

Multiple Regressions Summaries – Criteria and T-SD Factor Scores – Combined Group

Criteria	Predictors – Gender, GCA and Factors from the T-SD N, E, O, A, C
Leader= Leader expressed accurate goals of the task and expected results	R=.422 $R^2=.178$ R^2 adj=.151 -C/E ^a $F(4.119) = 6.45, p < .001$
Standard = Defined and maintained clear, measurable standards for the task	NS
Inspire = leaders ability to direct and motivate candidates in spite of their personal concern	NS
Support = Directed and supported subordinates behaviours/ activities	R=.282 $R^2=.079$ R^2 adj=.056 -C $F(3, 120) = 3.44, p < .01$
Task = sum of leader and standard scores	R=.362 $R^2=.131$ R^2 adj=.102 -C/E $F(4.119) = 4.49, p < .01$
Contextual = sum of inspire and support scores	R=.270 $R^2=.073$ R^2 adj=.050 -C $F(3, 120) = 3.15, p < .05$
Overall = overall performance score; sum of contextual and task scores	R=.357 $R^2=.127$ R^2 adj=.098 -C/E $F(4.119) = 4.33, p < .01$

a. C = Conscientiousness, E = Extraversion

Stepwise multiple regressions proceeded in the same manner for each group. On the first step, GCA and gender were entered together to control for their effect. On the second step, either the five factors from the T-SD or five facets were entered in stepwise fashion. One MR was conducted for each of the sets of facets previously chosen, therefore, each of the three groups had a series of six MRs computed (five with facets and one with factors) for each of the seven performance measures for a total of 42 MRs conducted for each group.

It is noteworthy that for neither of the two original groups, officers and non-officers, were there any significant regressions that included personality factors or facets.

For the officer group only, gender and IQ predicted the criteria *Leader expressed*

accurate goals of the task and expected results ($R = .293$, $F(2,98) = 4.60$, $p < .05$), as well as the task criteria (the sum of the two task scores) ($R = .242$, $F(2,100) = 3.03$, $p < .05$). Only with the combined group did personality variables add to the prediction of leadership above that predicted by gender and GCA. The results of the significant multiple regressions with the factors and facets are presented in Tables 15 and 16 respectively.

In the case of the analysis with the factors (Table 15), conscientiousness and extraversion are the only personality variables showing increased validity above gender and GCA¹¹. Conscientiousness and extraversion typically emerge as predictors of work behaviour in the literature (Judge, Bono, Ilies, & Gerhardt, 2002), however, in this case, conscientiousness shows an opposite relationship with that expected and previously reported. This finding was partially addressed previously with regard to the different patterns of responses for the officers and non-officers, and will be re-visited in the discussion section.

Although it had been decided to remove the IPIP from the multiple regressions analyses, for completeness in addressing this hypothesis, two additional multiple regression analyses were conducted with the overall performance score in the combined group: (1) the IPIP factors instead of the T-SD factors, and (2) the IPIP factors with the T-SD factors. The IPIP factors did not add any incremental variance in either of these two analyses. Only when the T-SD was present were there significant increases in predictive validity. This is an unexpected finding because of the very strong convergent validity of the IPIP with the T-SD.

¹¹ Preliminary results did not show a relationship between GCA and any performance criteria. Examination of the GCA measure indicated that the GC test masked the effect of GCA and, therefore, in all subsequent analyses, only those participants who had a CFAT score were included.

Table 16 summarizes the results of the multiple regressions with the five sets of facets and the combined group. There are a number of interesting results from these analyses. Again, conscientiousness and extraversion show significant incremental prediction over gender and GCA, in this case at the facet level. As with the factors, conscientiousness was negative and extraversion was positive. Also emerging as significant predictors of performance was a facet from the openness factor (negative o4; reflective), and the agreeableness factor (a2; considerate). Neuroticism (Emotional Stability) was the only personality dimension not represented at either the factor or facet level in any regression equation.

In addition to the multiple regressions reported above, the compound trait ACE was examined with each of the three experimental groups. ACE was added to the variables list that included the big-five factors from the T-SD in step two, after GCA and gender had been entered at step one. The compound trait ACE did not explain any additional variance for any of the groups. Even when entered alone (i.e., without the factors), ACE still had a non-significant relationship with leadership performance.

Finally, comparing the SME solution for facet selection and the correlation solution to facet selection in Table 16 (first and last columns), shows that the subject matter experts were quite accurate at predicting which facets would best represent their parent factors. This remarkable closeness suggests that the relationships of the facets with their parent factors is lexically intuitive; that is, it is possible to determine with accuracy which facet will best represent its factor. The SMEs were, however, not very good at predicting which facets would best predict the criteria.

Table 16

Multiple Regressions Summaries – Criteria and T-SD Facet Scores – Combined Group

	SME – most represent Factor ^b n1/e1/o3/a2/c1	SME – most likely to predict criteria n2/e4/o3/a4/c3	Literature-based n1/e4/o3/a4/c2	PCA selected n2/e2/o1/a2/c3	Highest correlation with Overall Performance n1/e1/o4/a2/c1
Criteria					
Leader ^a	R=.462 R^2 =.215 R^2 adj=.182 e1/-c1/a2 $F(5, 118) = 6.46, p < .001$	R=.331 R^2 =.110 R^2 adj=.087 -c3 $F(3, 120) = 4.92, p < .01$	NS	R=.379 R^2 =.144 R^2 adj=.115 -c3/e2 $F(4, 119) = 4.98, p < .001$	R=.505 R^2 =.255 R^2 adj=.217 -o4/e1/-c1/a2 $F(6, 117) = 6.69, p < .001$
Standard	NS	NS	NS	NS	NS
Inspire	NS	NS	NS	NS	NS
Support	NS	NS	NS	NS	NS
Task	R=.3435 R^2 =.189 R^2 adj=.155 e1/-c1/a2 $F(5, 118) = 5.50, p < .001$	NS	NS	NS	R=.477 R^2 =.228 R^2 adj=.188 -o4/a2/-c1/e1 $F(6, 117) = 5.75, p < .001$
Context	NS	NS	NS	NS	NS
Overall	R=.420 R^2 =.176 R^2 adj=.141 -c1/e1/a2 $F(5, 118) = 5.04, p < .001$	NS	NS	NS	R=.452 R^2 =.204 R^2 adj=.163 -o4/a2/-c1/e1 $F(6, 117) = 5.00, p < .001$

a. Leader = Leader expressed accurate goals of the task and expected results; Standard = Defined and maintained clear, measurable standards for the task; Inspire = leaders ability to direct and motivate candidates in spite of their personal concerns; Support = Directed and supported subordinates behaviours/ activities; Contextual = sum of inspire and support scores; Task = sum of leader and standard scores; Overall = overall performance score, which is a sum of contextual and task scores.

b. SME – most represent = those facets chosen by the military psychologists and defence scientists as most representative of their larger factor; SME –likely to predict crit = those facets chosen as most likely to predict the overall leadership performance; Theory-based = those facets indicated in the literature as related to leadership; PCA selected = those facets with the highest loading on its factor; Highest correlation = those facets with the highest zero-order correlation with the criteria of overall leadership performance.

c. c1=efficient and dependable, c2=hardworking, c3=organized, e1=shy and bashful, e2=talkative, a2=considerate, o4=reflective.

Table 17 extends and clarifies the results reported in Table 16. It shows the increase in validity of the full regression equations over GCA and gender, which averaged 9.49%. It should be noted that the criteria *inspire* (leaders ability to direct and motivate candidates in spite of their personal concerns), and *standard* (maintained clear, measurable standards for the task) were not predicted by any of the sets of facets or factors. For the remaining criteria that were predicted, it was consistently a set of facets

Table 17

Validity in Predicting Leadership Performance Criteria with T-SD Factors and Facets

Criteria	R ² 0	R ² 1	% Increase in R ²	Predictors ^b
Leader (highest correlation) ^a	.080	.255	17.5	o4/c1/e1/a2
Leader (SME - most represent Factor)	.080	.215	13.5	e1/c1/a2
Leader (Full Factors)	.080	.178	9.8	C/E
Leader (PCA selected)	.080	.144	6.4	c3/e2
Leader (SME – likely to predict criteria)	.080	.110	3.0	c3
Support (Factors)	.046	.079	3.3	C
Task Performance (SME - most represent Factor)	.069	.189	12.0	e1/c1/a2
Task Performance (highest correlation)	.069	.228	15.9	o4/a2/c1/e1
Task Performance (Full Factors)	.069	.131	6.2	C/E
Contextual Performance (Full Factors)	.042	.073	3.1	C
Overall Performance (highest correlation)	.060	.204	14.4	o4/a2/c1/e1
Overall Performance (SME - most represent Factor)	.060	.176	11.6	c1/e1/a2
Overall Performance (Full Factors)	.060	.127	6.7	C/E

Note: R²0 = multiple correlation squared of criteria with gender and GCA only. R²1 = multiple correlation squared of full predictive equation. % Increase in R² is R²1 - R²0.

a. Leader = Leader expressed accurate goals of the task and expected results; Standard = Defined and maintained clear, measurable standards for the task; Inspire = leaders ability to direct and motivate candidates in spite of their personal concerns; Support = Directed and supported subordinates behaviours/ activities; Contextual = sum of inspire and support scores; Task = sum of leader and standard scores; Overall = overall performance score, which is a sum of contextual and task scores.

b. c1=efficient and dependable, c2=hardworking, c3=organized, e1=shy and bashful, e2=talkative, a2=considerate, o4=reflective.

that showed the largest increase in R², not the factor set when both were present.

Secondly, in the case where both factors and facets predicted leadership performance

(leader, task, and overall), the facets outperformed the factors by an average of 7.0 %, ranging from 5.8 % to 7.7 %.

Hypothesis 3. *General cognitive ability will show a stronger relationship with task performance than will personality.*

This hypothesis was not supported. Tables 9 to 11 show the correlations between the cognitive and non-cognitive measures and task performance. In the non-Officer sample, Table 9, only personality variables correlated with task performance and, therefore, it was not possible to address the hypothesis with this group. For the other two groups, some aspects of cognitive ability and personality show significant correlations. In the officer sample (Table 10) the task elements of “leader” and the combined task measure both show significant personality and GCA correlations. The personality and the GCA variables with the smallest absolute difference between them, ignoring the direction of the sign (spatial ability sub-test of the CFAT and the o4 facet (reflective) for both the leader and the task criteria) were tested using Fisher’s r to z transformation for the significance of the difference between two correlations. The difference between the personality and the cognitive variables for “leader” was not significant, $z = -0.22, p = .82$ (two sided), as well as for the combined task criterion, $z = -0.20, p = .84$.

The same procedure as above was conducted for the combined sample. For “leader”, the difference between the problem solving sub-test of the CFAT and the facet o4 (reflective) was not significant, $z = 0.57, p = .56$. For the performance measure “task”, again the difference between the problem solving sub-test of the CFAT and the facet o4 (reflective) produced a non-significant difference, $z = 0.33, p = .74$.

Theoretically, the task elements of performance were expected to correlate with GCA and

the contextual elements with personality. Hypothesis four below addresses the latter part of this hypothesized relationship.

Hypothesis 4. *Personality will show a stronger relationship with contextual performance than will general cognitive ability.*

This hypothesis was not supported. Only with the larger combined group were there significant correlations with both personality variables and cognitive variables with which to compare the differences. As above, the personality variable and the cognitive variable with the smallest absolute differences (ignoring the direction of the sign) were compared using Fisher's r to z transformation for each of the contextual measures. For the two outcome variables where a relationship emerged between contextual performance and personality, significant differences were not found between the correlations; for the criterion "support", $z = 0.35$, $p = .72$, and for the combined contextual measure, $z = 0.52$, $p = .60$. Taken together, hypotheses three and four indicate generally that neither GCA nor personality has a stronger relationship task and contextual performance, although the absolute values of the correlations with GCA are higher with all performance criteria than are the correlations with the personality variables.

Hypothesis 5. *Overall leadership performance will be better predicted by broad personality factors than by their more narrow facets.*

This hypothesis contrasts the overall performance domain with the more specific task and contextual elements, and also addresses the bandwidth-fidelity dilemma. This dilemma suggests that broad predictors best predict broad criterion measures and conversely, more specific predictors (facets) best predict the more discrete aspects of performance (hypothesis six below). This hypothesis was not supported; in fact the opposite result was observed. Referring again to Table 17, we see that in all cases where

both facets and factors predict overall measures of leadership performance (Task, Contextual, and Overall), facets were better predictors of performance than factors.

Hypothesis 6. *Discrete aspects of the performance domain will be better predicted by more specific facets than by broad factors.*

This hypothesis was supported with a caveat: it depends on which facets were compared with the factors. Examination of Table 17 shows that in most cases facets are better predictors of the more discrete aspects of performance. Referring to the discrete criterion of *leader* (leader expressed accurate goals of the task and expected results), it can be seen that in three cases (PCA selected, SME likely to predict, and literature-based) the factors were better predictors than the facets chosen by the above means. However, where facets were chosen by their highest correlation with the overall performance criteria, or selected by SMEs as most representative of their larger factor, the facets outperformed the factors. This is evidence that the use of facets selected by either of these two methods will increase the likelihood of those traits maximally predicting personality-performance relationships.

Hypothesis 7. *The Openness factor will show a positive correlation with general intelligence.*

This hypothesis was supported. Examination of the correlation matrix with the full dataset revealed that none of the openness factors or facets correlated with any of the cognitive measures. However, when the groups were decomposed from the larger sample a different picture emerged, as shown in Table 18.

Table 18

Correlations Between the Cognitive Measures and the Openness Factors and Facets

Sample	Variables	r
CFRC	NS	
	GCA and o3 (creative)	r (180) = .244, p < .001
Officer	Spatial Ability and o3 (creative)	r (176) = .160, p < .05
	Problem Solving and o3 (creative)	r (176) = .191, p < .05
Non-Officer	GCA and o2 (scientific interest)	r (110) = .206, p < .05
	GCA and O factor T-SD	r (266) = .140, p < .05
Combined Group	GCA and o2 (scientific interest)	r (289) = .129, p < .05
	GCA and o3 (creative)	r (292) = .166, p < .01
	Spatial Ability and o3 (creative)	r (199) = .172, p < .05
	Problem Solving and o3 (creative)	r (199) = .172, p < .05

The openness factor correlated with GCA in the combined group, and beyond that, the facets labelled creative (o3) and scientific interest (o4) correlated with the full GCA measure and with the spatial and problem solving sub-tests of the CFAT. The CFAT verbal sub-test did not correlate with openness at the factor or the facet level.

To explore the relationship between GCA and openness more fully, a GCA x openness (T-SD) interaction term was created and explored in a MR with the combined group with the overall performance score as the criteria. The MR was conducted with the same variables as in Table 16 with the GCA x openness interaction variable added in the second step with the other personality variables. This interaction term did not alter the previous outcome (i.e., it did not add anything to the prediction of overall performance).

In the combined group, the openness factor and two facets from this factor (the facets o3 creative, and o2 scientific interest) correlated significantly with GCA. The other facets of the openness factor; o1 philosophical, o4 reflective and o5 cultured, did not show any relationship with cognitive ability.

Hypothesis 8. *The Openness factor will show a positive relationship with leadership task performance.*

This hypothesis relates to the question of openness being related to general cognitive ability and general cognitive ability in turn being related to task performance. This hypothesis was not supported. The openness factors from the T-SD and the IPIP did not demonstrate a relationship with any of the task performance measures. Only one facet from the T-SD, o4 (reflective), shows a negative relationship with the three task measures: Leader expressed accurate goals of the task and expected results, $r(212) = -.222, p < .001$, Leader defined and maintained clear, measurable standards for the task $r(212) = -.151, p < .05$, and Task composite (sum of leader and standard scores above), $r(212) = -.207, p < .01$. The direction of this correlation was negative, as was previously discussed.

DISCUSSION

The principal aim of the present study was to examine the efficacy of personality traits to increment general cognitive ability in the prediction of leadership performance, and it expands the literature in the field of personality at work, specifically as it relates to leadership in a military training context. The classic prediction model (Binning & Barrett, 1989; Guion, 1991; Ilgen, 1994) served as the conceptual foundation for this research, along with the theory of job performance proposed by Campbell, Gasser, and Oswald (1996). This theory posits that work is comprised of the following eight dimensions: (1) job-specific task proficiency, (2) non-specific job proficiency, (3) written and oral communication, (4) demonstrating effort, (5) maintaining personal discipline, (6) facilitating peer and team performance, (7) supervision/leadership, and (8) management/administration. Some of these dimensions are related to general cognitive ability and some are related to personality attributes. Using the Big-Five taxonomy of personality, this thesis explored whether certain personality factors (composites of traits) or facets (individual traits) were associated with superior leadership performance, and whether these personality attributes incremented prediction of performance over that obtained by general cognitive ability alone.

Secondary aims of this research were to examine the convergent validity of the T-SD with another well-established big-five measure, and to investigate other topical issues pertinent to measures of the Big-Five, such as the openness construct and the bandwidth-fidelity dilemma.

Summary of Findings

In this study, personality was shown to be a significant predictor of work performance and also shown to increment prediction over that provided by general cognitive ability. This has both practical and theoretical implications. From a practical standpoint, the present results provide guidance for selection systems, especially for jobs that require interactions with other people. In every military, teamwork is an integral part of all jobs. Although militaries typically refer to their teams as sections, platoons, companies, battalions, regiments, etc., they are nonetheless teams of individuals working toward collective goals. It is clear from this research that personality assessment can play a significant role in predicting leadership behaviour. Extending the present findings to the literature on personnel selection, it is also clear that systems that select individuals for entry level jobs, or for the creation of more specialized groupings, will benefit from the inclusion of personality variables in their array of predictors.

From a theoretical perspective, the present results suggest that comprehensive theories of work behaviour must include personality variables if they are to adequately predict multi-dimensional job performance, especially those theories that consider human interaction as an integral part of the work to be performed. Campbell, Gasser, and Oswald's (1996) eight-dimension model of work performance includes the aspects of facilitating peer and team performance, and supervision/leadership as two of the higher order performance domains in their model. The results of this thesis support the contention that the prediction of job performance along these two dimensions demands that personality variables be incorporated into the job performance model. Furthermore, as will be seen, other theoretical considerations are raised with regard to the relationships with conscientiousness and work performance, the bandwidth-fidelity dilemma, and, openness and intelligence.

Conscientiousness and Performance

Besides finding increased validity of personality over general cognitive ability, of particular interest in the present study was the atypical relationship observed between conscientiousness and leadership performance. The majority of previous research points to the big-five factors of conscientiousness and agreeableness as the two factors with the most promise to predict work across a variety of jobs, although the remaining three factors are also variously implicated (Barrick & Mount, 1991; Hurtz & Donovan, 2000; Judge, Bono, Ilies, & Gerhardt, 2002; Salgado, 2003; Tett, Jackson & Rothstein, 1991). Contrary to most previous research, in this study conscientiousness was seen to have a negative relationship with performance, both at the factor level and the facet level. While this finding is not unique (Bunce & West, 1995; Driskell, Hogan, Salas & Hoskin, 1994; Hogan, Hogan & Murtha, 1992), it is certainly rare and unexpected. One explanation for this finding has been proposed in the previous discussion on the between group differences. An alternate explanation centres on the training situation, specifically the novelty and stress of training to moderate the personality performance relationship. In this thesis, personality-performance relationships were examined in a realistic and precise assessment situation. The participants were undergoing military leadership training, in a direct leadership role (face-to-face leadership). They were immersed in a maximal performance situation ((Ployhart, Lim, & Chan, 2001; Sackett, Zedeck & Fogli, 1988) which generates a high degree of motivation, and they were assessed by trained and calibrated subject matter experts on both their task performance and their contextual performance (Borman & Motowidlo, 1993), as well as on their overall performance. As participants on these leadership training courses, their future career prospects were directly related to their success in this training, again engendering high degrees of

motivation. It is quite possible that high conscientiousness had a crippling effect on individuals as they worked through this complex leadership task. Recall that the leadership stands takes approximately four hours to complete and are comprised of a variety of simple and complex tasks which must be planned and executed in a synchronous manner, including managing the work of the section personnel the leader was assigned. An extremely conscientious person may become overwhelmed by the level of task detail, get bogged down at that level, and consequently not do well on the task overall. Colloquially, they could not separate the wheat from the chaff.

Formal CF leadership assessment is imbedded as part of the larger leadership course where, in the case of the new officers, they are also learning the basic of military life and culture, as well as numerous other subjects and skills. The non-officer group would not likely be experiencing the same level of stress as the officer group (i.e., they are already part of the military culture and know how to march and dress, they have experience working as a team, etc.), and will be better at situating their leadership training and assessment into the larger military and career context. That is, the non-officers were more likely to be able to distinguish the relevant and irrelevant aspects of their environment and less likely to spend time on trivial activities. They have many years of CF experience, and would certainly be better prepared to recognize what aspects of their leadership tasks were important to pay attention to and what could be safely ignored. Indeed, it was with the officer group, new members to the CF, where the negative relationship between conscientiousness and performance was observed

In summary, it has been typically reported that conscientiousness is predictive of most jobs, however, in the present case, conscientiousness appears not to be a relevant predictor of transactional leadership, and in fact it has a negative relationship. The

present finding may impose a limit on the generalizability of conscientiousness *vis. a vis.* leadership performance. As more specific predictor-outcome situations are identified and examined, it may well be that the universality of conscientiousness is further challenged and limited. That is, conscientiousness may well be the most important personality variable with regard to the world of work *generally*, but there will be situations where this is not the case. The maximal performance training situation in the present dissertation appears to be one.

Why did personality traits not emerge more convincingly? A recent meta-analysis of two styles of leadership by Bono and Judge (2004) has shown that the big-five factors differentially predict leadership behaviours. Specifically, they examined the relationship between personality and transformational and transactional leadership behaviours. Relationships with transactional leadership (mean $R^2 = .14$) were more weakly related to personality than were relationships with transformational leadership (mean $R^2 = .27$). Transactional leadership is characterized by the leader providing resources and support in exchange for followers' effort and performance. The transactional leader sets standards, monitors performance and takes corrective action when necessary (Bono & Judge, 2004). The leadership tasks in which the participants in this study were engaged have the characteristics of transactional leadership, and, therefore, in keeping with the finding of Bono and Judge (2004), relationships with personality variables would be expected to be weaker than if the leadership situation lent itself to a different style of leader behaviour (i.e., transformational).

Furthermore, situations may be classified as weak or strong (Mischel, 1977), and there is support for the notion that personality variables may be less salient in strong situations (Beaty, Cleveland, & Murphy, 2001; Perlow & Kopp, 2004). This occurs

because the characteristics of the situation demands, and reinforces, certain prescribed behaviours. The characteristics of the present study clearly describe a strong situation (maximal performance paradigm that had clear expectations of behaviour, with dramatic consequences for failure). In light of this, it would not be expected that personality traits would have the same impact as they would if the situation had been weak. Thus, while significant relationships were observed between some personality traits and performance in this study, many anticipated relationships did not manifest themselves because the *strength* of the situation masked these relationships.

Related to the above is the notion that the personality-performance relationship may become more salient with the passage of time. Helmreich, Sawin, and Carsrud (1986) describe the “Honeymoon Effect”, where they suggest that because of the novelty and accompanying demands of a new learning situation (e.g., new job), natural personality attributes are suppressed because of the highly motivating circumstances of the situation. As the demands of the situation diminish over time, natural personality dispositions emerge. For example, Perlow and Kopp (2004) show that conscientiousness was not a predictor of early learning on a graduate level accounting course ($r = .10$, ns), but that over time, conscientiousness emerges as a valid predictor at time two ($r = .14$, $p < .05$), and increased even more later at time three ($r = .19$, $p < .01$). Thus, although there appears to be stability of personality traits over the long term (Clark & Watson, 1999; Soldz & Vaillant, 1999), the measurement of the personality-performance relationship is sensitive to situational demands and the time interval between when the predictor and criterion data are collected.

Finally, training may have affected the relationship between personality traits and leadership behaviours (Bono & Judge 2004). Specifically, training may have acted as a

moderator and masked the true relationship between conscientiousness and leadership performance. There are many characteristics of the leadership training and assessment situation that suggest this possibility.

Both of the student groups were participating in career leadership courses as previously explained. These courses consist of formal instruction on the theory and practice of leadership, and the participants are given opportunities to exercise newly acquired skills prior to their formal assessments. They also receive feedback on their progress. It is a deliberate objective of training, that instruction and practice have the effect of levelling the playing field for all students, regardless of their prior experience with leading others. Consequently, if the instructors were successful in educating and training the students, the students would have been “standardized”. There would continue to be some between student variability in performance, however, potential leaders who are naturally “weak” will have been given the training and opportunity to practice and demonstrate leadership behaviours prior to their final, formal assessment. It should also be noted that in CF leadership training courses there is some degree of gamesmanship. Students on these courses want to pass, and indeed must pass, in order to advance their careers. They know they must not only play a particular role, they must also be seen to be playing the leadership role (i.e., exhibiting the appropriate leadership behaviours). A person who is typically shy or nervous could, when the situation demanded, exhibit the appropriate leadership behaviours because they would have received training on how to do this. Thus, given the extensive leadership training and the highly motivating circumstances, participants could have overcome any natural limitations imposed by their typical personality disposition, at least in the short term.

Had all the leadership assessments that were conducted throughout the course been examined, especially the early practice ones that were more temporally closer to the individuals' natural ability (i.e., not tainted by cumulative training effects), different results may have been obtained because training would not have moderated the personality-performance relationship.

In summary, notwithstanding the pervasive finding that, among personality variables, conscientiousness is frequently the most important in the context of predicting work behaviour, taken together, the above discussion points to the potential differential validity of conscientiousness, and indeed other personality factors. Future research should examine personality in different organizational contexts, in weak and strong situations, at the facet and the factor level, and, with a view to scrutinizing the training effect, with groups of individuals with varying amounts of experience and training.

Bandwidth-Fidelity Dilemma

Past research has been conflicting with regards to whether factors or facets are better predictors of work performance, that is, the bandwidth-fidelity dilemma. Some authors suggest that broad factors are of more use in predicting performance because most jobs are multidimensional and broad factors would capture more of the criterion variance than narrow facets (e.g., Hogan & Roberts, 1996). Others suggest that individual traits are more appropriate for prediction because of the increased fidelity of traits (e.g., Tett, Steele & Beauregard, 2003; Paunonen & Ashton, 2001).

The results of the present study indicate that the increase in the trait specific and criterion valid variance is of more practical value in predicting leadership behaviour than that provided by the more broad factors. Moreover, this was true whether the criteria were discrete aspects of performance or overall performance. It should also be noted that

only a few personality facets were significant predictors of performance in this study, and these facets showed various patterns of predictive validity across the performance measures. The openness facet *creative*, for example, only predicted task performance, not contextual performance. Thus, within factors, the individual facets showed differential validity. The implications of this are that, not only were the facets able to account for more variance in performance than their factors, the facets that comprise the factors account for differing amounts of variance and must be carefully chosen with a view to their relationship with the criteria. And, as has been demonstrated, people are quite good at selecting facets that are likely to account for the majority of variance in a particular factor, that is, selecting a facet that best represents its parent factor.

Openness to Experience and General Cognitive Ability

Previous research has been inconsistent with regards to the openness factor and its relationship to general cognitive ability. This study presents evidence that the big-five factor openness, specifically the facets *creative* and, to a lesser extent, *scientific interest* were related to general cognitive ability as measured by the CFAT. In the officer group and the combined group, the overall measure of GCA and the CFAT sub-tests of problem solving (arithmetic) and spatial ability were significantly correlated with creativity. It has been previously suggested that openness is closely related to divergent thinking and to creativity (Flynn, 2005). The openness factor as presented in the T-SD, may be less of an academic form of intelligence and more related to what Cattell (1987) defines as fluid intelligence (Gf). Fluid intelligence includes such abilities as problem-solving, learning, and pattern recognition. This is contrasted with crystalized intelligence (Gc), which includes the ability to do well on verbal tasks, which is influenced by previous knowledge and learning. Lochbaum, Karoly and Landers (2002) have shown,

for example, that openness is a significant predictor of fluid intelligence, with openness accounting for 16% of unique variance in the Culture Free Intelligence Test. That is, openness may be more related to Gf than to Gc. In this thesis that suggestion is supported. There were no correlations between openness and the verbal subtest of the CFAT, a measure of Gc; only correlations with the problem solving and the spatial ability subtest (Gf). This suggests that openness, as it is operationalized with Big Five measures, is not intelligence in an academic sense but more in a sense of processing capacity, the ability to think through problems, not simply recall and apply information.

Furthermore, Sternberg (1985) conceptualizes intelligence as comprised of three factors, the so-called triarchic theory of human intelligence. The first factor (analytical) is conceptually similar to traditional academic-like intelligence. The second factor (creative) involves a person's ability to generate insights, synthesize information, and react appropriately to novel stimuli in their environment. Finally, the third factor (practical), akin to street smarts, describes a person's ability to understand and deal with common everyday challenges. The exercise of leadership is more than simply powering through intellectual challenges, but also includes aspects of dealing with novel situations and adapting to a changing environment (Sternberg's 2nd and 3rd factors).

In contrast to the above discussion, however, several authors argue that the relationship between openness and intelligence is not with fluid intelligence but with crystallized intelligence (Ackerman & Rolfhus, 1999; Ashton, Lee, Vernon & Jang, 2000; Brand, 1994). For example, Ashton, *et. al.*, (2000), using the Multidimensional Aptitude Battery (Jackson, 1984), reported a correlation of .37 with openness to experience and crystallized intelligence, and a more modest correlation of .18 with fluid intelligence. McCrae and Costa (1985) reported a correlation of .32 between openness

and the vocabulary subtest of the WAIS. These results suggest that openness is not as strongly related to the ability to reason and solve problems as it is to prior knowledge and learning (i.e., crystallized intelligence).

The previous discussion has shed some light on the relationship between openness and general cognitive ability, however, it has also highlighted the fact that this relationship is still not well understood. Certainly the present results point to the fact that openness is related to psychometric intelligence, but it is also comprised of other aspects of intelligence. It is apparent that the investigation of openness and its relationship with intelligence must be framed within different conceptualizations of intelligence; academic intelligence, and more socially relevant constructs related to fluid, creative, or adaptive capacities.

Convergent Validity of the T-SD and the 50 Item IPIP Marker Test

The CF is investigating the efficacy of introducing a personality inventory into the selection process for entry into the CF and for selection for specific assignments (e.g., special forces, and close protection teams), consequently, one of the practical considerations of this research concerned the convergent validity of T-SD and IPIP marker test. Given the number of Big Five instruments available, an obvious question is which of the available inventories is best for CF use? Previous research suggests that the T-SD should be selected (O'Keefe, 1998), and the present study confirms this. One of the challenges of conducting research with the T-SD, however, is that it is not used outside the militaries of a few nations and not available for public research. Thus,

comparing the T-SD with other well-established instruments is an essential step in a program to confirm or deny the selection of the T-SD as the inventory of choice.

It is puzzling that the IPIP marker test did not predict any aspects of performance, however, the T-SD factors did not do particularly well either at predicting performance in this study. The IPIP marker test is significantly shorter than the T-SD. Moreover, only two of the T-SD factors were predictive of some of the performance measures. Notwithstanding the IPIP and the T-SD were not particularly good predictors of performance, the salient point is that the T-SD and the IPIP marker test showed substantial convergent validity. Consequently, the CF could proceed with a program to introduce the T-SD into its selection and assessment inventory.

Consistent with the theory and literature on personality and work, personality is an important construct to be used for the prediction of work behaviours. Four of the big-five factors were represented at either the factor or facet level, however, facets consistently outperformed factors in terms of their increased validity in predicting all aspects of leadership performance assessed in this study.

Generalizability of findings

Although the findings of this study were observed within the bounds of a Canadian Forces leadership training course, they may be applied in personnel selection situations beyond this population. The major finding that the personality facets possess specific predictive variance is, in particular, worthy of mention. Reflecting back to the generic selection model, the greatest amount of predictive validity is obtained by aligning specific predictors to specific performance criteria. This method should apply regardless of the predictors and criteria used in any predictive validity study. In this thesis, the specificity afforded by individual traits, carefully chosen for their hypothesized or

statistical relationship with the criteria, worked better than broader factors in predicting job relevant behaviour, at least in face-to-face leadership tasks.

Shortcomings of this research

As with any research, there are number of methodological limitations in this dissertation. Chief among these limitations is the fact that it was not anticipated that training would have such a dramatic effect and confound the relationship between personality and performance. One of the challenges of applied research is the lack of control over all the variables that a laboratory experiment seeks to control. Training was not controlled for in this study and it is believed that the training situation in which the study was conducted is the cause of a number of unusual results. In essence, respondents were instructed and shown how to act as leaders and, regardless of any personality traits that may act against their natural ability to lead (e.g., shyness), they could perform the required tasks adequately following training. This learned behaviour, coupled with the inherently highly motivating circumstances of the maximal performance situation, would have allowed most people to successfully command others on these training courses, regardless of their natural personality dispositions.

Another limitation of this study was that only self-reports of personality were obtained. This may have resulted in responses that would have, in turn, affected the criterion related validities. For example, Small and Diefendorff (2006) used observer ratings (i.e., supervisor and co-worker) and self-ratings of Big Five personality factors in a predictive validity study. Their results indicated that observer ratings of personality accounted for incremental variance in job performance beyond that accounted for by self-ratings alone. Thus, important sources of predictor variance were not accounted for in this study.

Furthermore, self-report personality is depicted as “typical”, yet the performance domain assessed herein was “maximal”. The maximal performance condition had the effect of pushing the respondents into a performance style that was not representative of their usual behaviour. And, since they would have been highly motivated to succeed in training, even shy individuals, for example, could display appropriately learned extraverted leadership behaviours for the duration of their assessment period.

The present research could have benefited from a more detailed specification/ operationalization of the context and task assessments. The instructions and the assessment forms provided to the raters may have lacked sufficient detail for them to make subtle differentiations in the performance of the participants. They may not have fully understood, for example, that what was asked of them when they were rating the criterion *leader expressed accurate goals of the task and expected results*, was an assessment of the knowledge and process of leading, and when they assessed *directed and supported subordinates behaviours/ activities*, what was expected of them was to focus on the interpersonal activities of the participant. This leads to the final shortcoming, which relates to calibration of the raters. The SME raters are calibrated to assess the leadership performance of the participants in their standardized leadership tasks, however, the researcher did not travel to the various research locations to ensure the same degree of calibration was provided for the experimental assessments. The raters were given detailed instructions but it is not known to what degree they interpreted those instructions homogeneously.

Future Considerations/Recommendations

Although not directly related to the findings of this study, there is a need for a common agreement of personality facets. The ambiguity that presently permeates

research on facets is the same as that which was present before the identification and naming of the five factors. With no common agreement on at least some core set of facets, the literature will continue to be held back by research that is fragmented because of a lack of agreement on the facets. Chernyshenko, Goldberg, Roberts, and Stark (2005) state that there is a “complete lack of an acceptable lower-order taxonomy” of facets. The T-SD for example, has 22 facets. It is unlikely that this number of facets represents the total range of potential facets, or even the best ones, and so, it is probable that had different facets been included in this study, different relationships may have been observed. As more studies point to the greater efficacy of lower level traits to predict performance, such as in the present thesis, advances in personality research will be the hampered by the same problem that characterized trait research before the “discovery” of the big-five factors (i.e., no agreed upon taxonomy of traits).

Regarding the present results, it would be interesting to follow-up with the respondents from this study to investigate how their careers have progressed. It has been approximately three years since the data were collected on these people. All CF members receive an annual personnel evaluation report (PER), in which they are rated on a number of job performance factors, including leadership. Furthermore, PERs are measures of typical performance, in that they cover a broad range of performance over a 12-month period. Thus, this presents an opportunity to determine if the self-report of typical personality might predict typical leadership performance and other job-relevant behaviours of people engaged in their jobs on a daily basis. Furthermore, the “honeymoon effect” phase will have passed, and it is likely that the personality-performance relationships will be better observed.

It was anticipated that neuroticism would predict leadership outcomes, and that this factor would be particularly salient for those who did poorly and especially those who failed. However, criterion data on those who failed training was not available. It is, therefore, recommended in futures studies of this type, to gather data on all the participants regardless of the outcome of training so that the relationship between neuroticism and training failure can be explored.

It was expected that compound traits that were purposely constructed would account for more variance than individual factors. This was not true in the present case, however, this notion requires further exploration. Since the facets were better predictors than the factors, it may be fruitful to construct and examine compounds of facets and capitalize on the specific variance located at the individual trait level.

REFERENCES

- Ackerman, P.L., & Heggestad, E.D. (1997). Intelligence, personality, and interests: Evidence for overlapping traits. *Psychological Bulletin*, 121, 219-245.
- Ackerman, P.L., & Rolfhus, E.L. (1999). The locus of adult intelligence: Knowledge, abilities, and non-ability traits. *Psychology and Aging*, 14, 314-330.
- Allport, G.W., & Odbert, H.S. (1936). Trait names: a psycho-lexical study. *Psychological Monographs*, 47.
- Anastasi, A., & Urbina, S. (1997). *Psychological Testing*. New Jersey: Prentice-Hall.
- Ashton, M.C., Lee, K., Vernon, P.A., & Jang, K.L. (2000). Fluid intelligence, crystallized intelligence, and the Openness/Intellect factor. *Journal of Research in Personality*, 34, 198-207.
- Ashton, M.C., Perugini, M., de Vries, R. E., Boies, K., Lee, K., Szarota, P., Di Blas, L., De Raad, B. (2004). A Six-Factor Structure of Personality-Descriptive Adjectives: Solutions From Psycholexical Studies in Seven Languages. *Journal of Personality & Social Psychology*, 86 (2), 353-366.
- Aziz, S., & Jackson, C.J (2001). A comparison between three and five factor models of Pakistani personality data. *Personality & Individual Differences*, 3, 1311-1319.
- Avolio, B.J. (1999) *Full Leadership Development: Building the Vital Forces in Organizations*. Thousand Oaks, CA: SAGE.
- Axton, T., Sederburg, M., & Wolf, C. (2004). Validity of broad versus specific personality scales: A test. Paper presented at the 19th Annual Society for Industrial and Organizational Psychology Conference, April 2-4, 2004, Chicago, IL.
- Barker, R., (1997). How can we train leaders if we don't know what leadership is? *Human Relations*, 50, 343-362.
- Barrick, M.R. & Mount, M.K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Barrick, M.R., Mount, M.K., & Judge, T.A. (2001). Personality and performance at the beginning of the millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9, 9-30.
- Bartone, P.T, Snook, S.A., Tremble, & Trueman, T.R. (2002). Cognitive and personality predictors of leadership performance in West Point cadets. *Military Psychology*, 14, 321-339.

- Bass, B.M. (1990). *Handbook of Leadership: Theory, Research, and Managerial Applications* (3rd ed.), New York: The Free Press.
- Beaty, J.C., Cleveland, J.N., & Murphy, K.R. (2001). The relation between personality and contextual performance in “strong” versus “weak” situations. *Human Performance*, 14, 125-148.
- Benet-Martinez, V. (1999). Exploring indigenous Spanish personality constructs with a combined emic-etic approach. In J.C. Lasry, J.G Adair & K.L.Dion (Eds.), *Latest Contribution to Cross Cultural Psychology*, pp. 151-175. Lisse, The Netherlands: Swets & Zeitliner.
- Binning, J.J., & Barrett, G.V. (1989). Validity of personnel decisions: A conceptual analysis of the inferential and evidential basis. *Journal of Applied Psychology*, 74, 478-494.
- Bittell, L. (1984). *Leadership: The key to Management Success*. New York: Franklin Watts.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, 117, 187-215.
- Bono, J.E., & Judge, T.A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, 59 (5), 901-910.
- Borman, W.C., Hanson, M.A., & Hedge, J.W. (1997). Personnel Selection. *Annual Review of Psychology*, 48, 299-337.
- Borman, W.C., & Motowidlo, S.J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmidt & W.C. Borman (Eds.), *Personnel Selection in Organizations*. San Francisco: Jossey-Bass.
- Brand, C.R. (1994). How many dimensions of personality? The “Big 5” the “Gigantic 3” or the “Comprehensive 6”. *Psychologica Belgica*, 34, 257-273.
- Bryman, A (1992) *Charisma and Leadership in Organizations*. London: SAGE
- Bunce, D., & West, M.A. (1995). Self perceptions and perceptions of group climate as predictors of individual motivation at work. *Applied Psychology: An International Review*, 44, 199-215.
- Burns, J.M. (1978). *Leadership*. New York: Harper Row.
- Campbell, J.P. (1990). An overview of the army selection and classification project (Project A). *Personnel Psychology*, 43, 231-239.

- Campbell, J.P., Gasser, M.B., & Oswald, F.L. (1996). The substantive nature of job performance variability. In K.R. Murphy (Ed.), *Individual differences and behaviour in organizations*. San Francisco: Jossey-Bass.
- Careless, S (1999, June). *A brief measure of transformational leadership*. Paper presented at the Third Australian Industrial and Organizational Conference, Brisbane.
- Cattell, R.B (1943). The description of personality: Foundations of trait measurement. *Psychological Review*, 50, 559-594.
- Cattell, R.B (1987). *Intelligence; Its structure, growth and action*. New York, NY: Springer.
- Cattell, R.B., & Cattell, H.E.P. (1995). Personality structure and the new fifth edition of the 16PF. *Educational & Psychological Measurement*, 55, 926-938.
- Chamorro-Premuzic, T., & Furnham, A. (2005). *Personality and Intellectual Competence*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Chan, K-Y (1999). *Research and theory on the motivation to lead: Implications for officer selection*. Paper presented at the 41st Annual Conference of the International Military Testing Association, Monterey, CA.
- Chernyshenko, O.S., Goldberg, L.R., Roberts, B.W., & Stark, S. (2005). The structure of conscientiousness: An empirical investigation based on seven major personality questionnaires. *Personnel Psychology*, 58.
- Cheung, F.M., & Leung, K. (1998). Indigenous personality measures: Chinese examples. *Journal of Cross-Cultural Psychology*, 29, 233-248.
- Christal, R.E., (1993). *R & D Summary report F33615-91-D-0010*. Armstrong Laboratories, Brooks AFB, San Antonio.
- Christensen, J.M., & Mills, R.G. (1967). What does the operator do in complex systems? *Human Factors*, 9, 329-340.
- Cloninger, S.C. (2000). *Theories of Personality: Understanding Persons (3rd ed.)*. Upper Saddle River, NJ. Prentice Hall.
- Collis, J.M., (1995). The trait-self description inventory: a comparison of factor structure across delivery devices. *Report DRA/CHS/HS3/CR95067/01*. Defence Research Agency, Farnborough, Hampshire.
- Collis, J.M. & Elshaw, C.C. (1998). The development of the Trait-Self Description Inventory: Results of US/UK collaboration. The Technical Cooperation Program/HUM TP-3/98-001.

- J.B. Sykes (Ed.) (1976). *Concise Oxford Dictionary*, (6th ed.) Oxford: Clarendon Press.
- Cooper, S. (1999, June). *Re-assessing leadership assessment: Current consideration from an interdisciplinary research perspective*. Paper presented at the Annual Conference of the International Personnel Management Assessment Advisory Council, St. Petersburg.
- Cortina, J.M., Doherty, M.L., Schmidt, N., Kaufman, G., & Smith, R.G. (1992). The "Big Five" personality factors in the IPI and the MMPI: Predictions of police performance. *Personnel Psychology*, 45, 119-140.
- Costa, P.T. & McCrae, R.R. (1992). *NEO PI-R Professional Manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P.T. & McCrae, R.R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment*, 64, 21-50.
- Cronbach, L.J. (1990). *Essentials of Psychological Testing* (5th ed.). New York: Harper & Row.
- Cross, T. (1998). A question of psychology – Factors affecting the psychology of commanders at the operational level and the use of psychology in selecting the right man for the job. *Combat Arms*, 1/98, 87-102.
- Dawda, D. (1997). The NEO Five Factor Model and Skimming the Surface of the Wetlands of Personality. Retrieved July 2005 from: <http://www.sfu.ca/~wwwpsyb/issues/1997/summer/dawda.htm>
- Di Blas, L., & Forzi, M. (1999). Refining a Descriptive Structure of Personality Attributes in the Italian Language: The Abridged Big Three Circumplex Structure. *Journal of Personality & Social Psychology*, 76, 451-482.
- Digman, J.M. (1989). Five robust trait dimensions: Development, stability and utility. *Journal of Personality*, 57, 195-214.
- Digman, J.M. (1997). Higher order factors of the Big Five. *Journal of Personality and Social Psychology*, 73, 1246-1256.
- Drake, (1944). A study of leadership. *Character and Personality : A Quarterly for Psychodiagnostic and Allied Studies*, 12, 285-289.
- Driskell, J.E., Hogan, J., Salas, E., & Hoskin, B. (1994). Cognitive and personality predictors of training performance. *Military Psychology*, 6, 31-46.
- Dudley, N.M., Orvis, K.A., & Lebiecki, J.E. (2003, April). *A meta-analytic investigation of Conscientiousness in the prediction of job performance: Examining the intercorrelations and the incremental validity of narrow traits*. Paper presented at

the 18th Annual Conference of the Society for Industrial and Organizational Psychology, Orlando.

- Elshaw, C., & Abram, M. (1997). Personality and expectations and the prediction of early voluntary wastage in officer training. Centre for Human Sciences, Defence Evaluation and Research Agency, UK.
- Emmons, R.A., (1986). Personal strivings: An approach to personality and subjective well-being. *Personality and Social Psychology Bulletin*, 23, 915-927.
- Eysenck, H.J. (1991). Dimensions of personality: 16, 5 or 3? – Criteria for a taxonomic paradigm. *Psychology and Individual Differences*, 12, 773-790.
- Fiedler, F.E. (1996). Research on leadership selection and training: One view of the future. *Administrative Science Quarterly*, 41, 241-250.
- Flynn, F.J. (2005). Having an open mind: The impact of openness to experience on interracial attitudes and impression formation. *Journal of Personality and Social Psychology*, 88, 816-826.
- Foster, J. (2004). Do personality measures interact in predicting performance: A statistical examination. Paper presented at the 19th Annual Society for Industrial and Organizational Psychology Conference, April 2-4, 2004, Chicago, IL
- Friel, C. M., (2006). Factor Analysis: Principal components factor analysis. Use of extracted factors in multivariate dependency models. Retrieved May 26, 2006 from http://www.shsu.edu/~icc_cmf/cj_742/stats9.doc.
- Fujita, F. (1996). The Big Five taxonomy. Retrieved July 16, 2004 from <http://www.iusb.edu/~ffujita/Documents/big5.html>.
- Funder, D.C. (2001). Personality. *Annual Review of Psychology*, 52, 197-221.
- Goldberg, L.R. (1981). Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Eds.). *Review of Personality and Social Psychology* (Vol. 2, pp. 141-165). Beverly Hills: Sage.
- Goldberg, L.R. (1998). International Personality Item Pool: A scientific collaboratory for the development of advanced measures of personality and other individual differences. (on-line). Available http://ipip.ori.org/ipip/new_home.htm.
- Goldberg, L.R. (1992). The development of markers for the Big Five factor structure. *Psychological Assessment*, 4, 26-42.
- Goldberg, L.R. (1990). An alternative “description of personality”: The Big Five factor structure. *Journal of Personality and Social Psychology*, 59, 1216-1229.

- Goldberg, L.R., Sweeney, D., Merenda, P.F., & Hughes, J.E. Jr., (1999). The Big Five factor structure as an integrative framework: An analysis of Clarke's AVA model. *Journal of Personality Assessment*, 66, 441-471.
- Guilford, J.P. (1975). Factors and facets of personality. *Psychological Bulletin*, 82, 802-814.
- Guion, R.M. (1991). Personnel assessment, selection, and placement. In M.D. Dunnette and L. Hough (Eds.). *Handbook of Industrial and Organizational Psychology* (2nd ed., Vol 2). Palo Alto, CA: Consulting Psychology Press.
- Hackett, R.D. (2002). Understanding and Predicting Work Performance in the Canadian Military. *Canadian Journal of Behavioural Science*, 34, 131-140.
- Helmreich, R.L., Sawin, L.L. & Carsrud, A.L. (1986). The Honeymoon Effect in job performance: Temporal increases in the predictive power of achievement motivation. *Journal of Applied Psychology*, 71, 185-188.
- Hersey, P., Blanchard, K.H., & Johnson, D.E. (1996). *Management of Organizational Behavior*, 7th Ed. Upper Saddle River, NJ. Prentice Hall.
- Hogan, R. (1994). Trouble at the top: Causes and consequences of managerial incompetence. *Consulting Psychology Journal*, 46, 9-15.
- Hogan, R. (1983). A socioanalytic theory of personality. In Page M.M. (Ed.), *Personality – Current Theory and Research: Nebraska Symposium on Motivation*. Lincoln, NE: University of Nebraska Press.
- Hogan, R. (1986). *Manual for the Hogan Personality Inventory*. Minneapolis: National Computer Systems.
- Hogan, R. (1999, June). *Personality, leadership and organizational effectiveness*. Paper presented at the Third Australian Industrial and Organizational Conference, Brisbane.
- Hogan, R. (2005). Comments. *Human Performance*, 18(4), 405-407.
- Hogan, R., Curphy, G.J., & Hogan, J. (1994). What we know about leadership: Effectiveness and personality. *American Psychologist*, 49, 493-504.
- Hogan, J., Hogan, R., & Murtha, T. (1992). Validation of a personality measure of job performance. *Journal of Business & Psychology*, 7, 225, 236.
- Hogan, J. & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective. *Journal of Applied Psychology*, 88, 100-112.

- Hogan, R., Hogan, J. & Roberts, B.W. (1996). Personality measurement and employment decisions: Questions and answers. *American Psychologist*, 51, 469-477.
- Hogan, J. & Roberts, B.W. (1996). Issues and non-issues in the fidelity-bandwidth trade-off. *Journal of Organizational Behaviour*, 17, 627-637.
- Hogan R.T., & Roberts, B.W. (2001). Introduction: Personality and industrial and organizational psychology. In Roberts, B.W & Hogan, R.T. (Eds.) *Personality Psychology in the Workplace*. Washington: American Psychological Association.
- Holden, R. R., Wasylikiw, L., Starzyk, K. B., Book, A. S., & Edwards, M. J. (2006). Inferential structure of the NEO Five-Factor Inventory: Construct validity of the Big Four personality clusters. *Canadian Journal of Behavioural Science*, 38, 24-40.
- Hough, L.M (1992). The “Big Five” personality variables – construct confusion: Description versus prediction. *Human Performance*, 5, 139-155.
- Hough, L.M & Schneider, R.J. (1996). Personality traits, taxonomies, and applications in organizations. In Murphy, K.R. (Ed.) *Individual Differences and Behaviour in Organizations*. San Francisco: Jossey-Bass.
- Hough, L.M., Dunnette, M.D., Kamp, J.D., McCloy, R.A. (1990). Criterion-related validities of personality constructs and the effect of response distortion on those validities. *Journal of Applied Psychology*, 75, 581-595.
- House, R.J. & Aditya, R.N. (1979). The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23, 409-473.
- House, R.J. & Howell, J.M. (1992). Personality and Charismatic Leadership. *Leadership Quarterly*, 3, 81-108.
- House, R.J., Shane, S.A., & Herold, D.M. (1996). Rumours of the death of dispositional research are vastly exaggerated. *Academy of Management Review*, 21, 203-224.
- Hunt, S.T. & Paajanen, G. (2003, April). *The value of uncommon variance: Designing personality selection measures for multi-dimensional predictor and criteria spaces*. Paper presented at the 19th conference of the Society for Industrial Organizational Psychology, Orlando.
- Hunter, J.E & Hunter, R.F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, 96, 72-98.
- Hurtz, G.M. & Donovan, J.J. (2000). Personality and Job Performance: The Big Five revisited. *Journal of Applied Psychology*, 85, 869-879.

- Ilgen, D.R. (1994). Jobs and roles: Accepting and coping with changing structure of organizations. In Rumsey, M.G., Walker, C.B., & Harris, J.H.(Eds.), *Personnel Selection and Classification*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Jackson, C.J. (1984). *Multidimensional Aptitude Battery Manual*. Port Huron, MI: Research Psychology Press.
- Jacobs, T.O., and Jaques, E. (1991). Executive Leadership. In R. Gal & A.D. Mengelsdorf (Eds.), *Handbook of Military Psychology*. Chichester, England: Wiley.
- John, O.P. (1990). The "Big-Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In Pervin, L.A., & John, O.P. (Eds.), *Handbook of Personality: Theory and Research*. New York: Guilford Press.
- John, O.P. & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement and theoretical perspectives. In Pervin, L.A., & John, O.P. (Eds.), *Handbook of Personality: Theory and Research*. New York: Guilford Press.
- Johnson, J. W. (2002). Toward a better understanding of the relationship between personality and job performance. In M.R. Barrick & A.M. Ryan (Eds.). *Personality and Work*. San Francisco: Jossey-Bass.
- Judge, T., Bono, J.E., Ilies, R., & Gerhardt, M.W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765-781.
- Katz, D., & Kahn, R.L. (1966). *The Social Psychology of Organizations*. New York: Wiley.
- Kaiser, R.B. (1998, April). *Personality correlates of perceived senior executive effectiveness: An application of the five-factor model*. Poster presented at the 13th annual meeting for the Society for Industrial and Organizational Psychology, Dallas.
- Kyllonen, P. (1997). Smart testing. In R. Dillon (Ed.), *Handbook on Testing*. Westport, CT: Greenwood.
- Kotter, J.P. (1988). *The Leadership Factor*. New York: The Free Press.
- Lochbaum, M.R., Karoly, P., & Landers, D. M. (2002). Evidence for the importance of openness to experience on performance of a fluid intelligence task by physically active and inactive participants. *Research Quarterly for Exercise and Sport*, 4, 437-444.
- Lyman, H.B. (1978). *Test scores and what they mean*. New Jersey: Prentice-Hall.
- Mann, R.D. (1959). A review of the relationship between personality and performance in small groups. *Psychological Bulletin*, 56, 241-270.

- McCrae, R.R., & Costa, P.T. Jr. (1985). Updating Norman's "adequacy taxonomy": Intelligence and personality dimensions in natural language and in questionnaires. *Journal of Personality and Social Psychology*, 49, 710-721.
- McCrae, R.R., & Costa, P.T. Jr. (1999). A five-factor theory of personality. In Pervin, L.A., & John, O.P. (Eds.), *Handbook of Personality: Theory and Research*. New York: Guilford Press.
- McHenry, J.J., Hough, L.M., Toquam, J.L., Hanson, M.A., & Ashworth, S. (1990). Project A validity results: The relationship between predictor and criteria domains. *Personnel Psychology*, 43, 335-367.
- McManus, M.A., & Kelly, M.L. (1999). Personality measures and biodata: Evidence regarding their incremental predictive value in the life insurance industry. *Personnel Psychology*, 52, 137-148.
- Meindl, J.R. (1990) On Leadership: An Alternative to the Conventional Wisdom. In Staw, B.M. and Cummings, L.L. (Eds) *Research in Organizational Behavior* Vol 12 . London: JAI Press.
- Meindl, J.R., Ehrlich, S.B. and Dukerich, J.M. (1985) The Romance of Leadership, *Administrative Science Quarterly*, 30, 78-102.
- Mellor, D (2002). The role of personality in leadership: An application of the five-factor model in the Australian military. *Military Psychology*, 14, 179-198.
- Mount, M. K., Barrick, M. R., & Stewart, G. L. (1998). Five factor model of personality and performance in jobs involving interaction with others. *Human Performance*, 11, 145-165.
- Mervielde, I. (1993). The B5BBS25: A Flemish set of bipolar markers for the "Big Five" personality factors. *Psychologica Belgica*, 32, 195-210.
- Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N.S. Endler (Eds.), *Personality at the Crossroads: Current Issues in Interactional Psychoogy*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Murphy, K.R., & Shiarella, A, H. (1997). Implications of the multidimensional nature of job performance for the validity of selection tests: Multivariate frameworks for studying test validity. *Personnel Psychology*, 50, 823-854.
- Northouse, P. (1997). *Leadership: Theory and Practice*. Thousand Oaks, CA: Sage.
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric Theory* (3rd Ed.). New York, NY: McGraw-Hill, Inc.

- O'Connor, B.P. (2002). A quantitative review of the comprehensiveness of the five-factor model in relation to popular personality inventories. *Assessment*, 9, 188-203.
- O'Keefe, D. (1998). Investigating the use of occupational personality measures in the Canadian Forces selection system. *Technical Note 98-14*. Directorate of Human Resources Research and Evaluation, National Defence Headquarters, Ottawa, Canada.
- Ones, D.S., Viswesvaran, C. & Dilchert, S. (2005). Personality at work: Raising awareness and correcting misconceptions. *Human Performance*, 18(4), 389-404.
- Ones, D.S., Viswesvaran, C. & Schmidt, F.L. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of Applied Psychology*, 78, 679-703.
- Ormerod, M.B., McKenzie, J., & Woods, A. (1995). Final report on research relating to the concept of five separate dimensions of personality--or six including intelligence. *Personality & Individual Differences*, 18, 451-461.
- Park, R.E. (1999). *How to improve the hiring interview at CF recruiting centres for non-commissioned member and officer applicants*. DeGroote School of Business, McMaster University, Hamilton, Ontario.
- Pauchant, T.C. (1991). Transferential leadership : Towards a more complex understanding of charisma in organizations. *Organizational Studies*, 12, 257-273.
- Paunonen, S.V. & Ashton, M. C. (2001). Big Five factors and facets and the prediction of behavior. *Journal of Personality & Social Psychology*, 81, 524-539.
- Paunonen, S.V., & Nicol, A.A.A.M. (2001). The personality hierarchy and the prediction of work behaviors. In, Roberts, B. W. & Hogan, R (Eds.), *Personality Psychology in the Workplace*. Washington, D.C.: American Psychological Association.
- Paunonen, S.V., Zeidner, M., Engvik, H.A., Oosterveld, P., & Malipant, R. (2000). The non-verbal assessment of personality in five cultures. *Journal of Cross Cultural Psychology*, 29, 9-31.
- Perlow, R., & Kopp L.S. (2004). Conscientiousness and ability as predictors of accounting Learning. *Human Performance*, 17 (4), 359-373.
- Ployhart, R.E., Lim, B., & Chan, K.Y. (2001). Exploring relations between typical and maximum performance ratings and the five factor model of personality. *Personnel Psychology*, 54, 809-844.
- Robbins, S.P. and Langton, N. (1999) *Organizational Behavior: Concepts, Controversies, Applications*. Scarborough: Prentice Hall

- Robertson, I.T. (1994). Personality and personnel selection. In C.L. Cooper & D.M. Rousseau (Eds.). *Trends in Organizational Behaviour*, (1). Chichester: John Wiley & Sons Ltd.
- Robertson, I.T., & Makin, P.J. (1986). Management selection in Britain: A survey and critique. *Journal of Occupational Psychology*, 59, 45-57.
- Rost, J. (1991). *Leadership for the Twenty-first Century*. Westport, CT: Praeger.
- Rumsey, M.G. (1999, November). *Officer selection in the 21st century*. Paper presented at the 41st Annual Conference of the International Military Testing Association, Monterey.
- Salgado, J.F. (1997). The five factor model of personality and job performance in the European community. *Journal of Applied Psychology*, 82, 30-43.
- Salgado, J.F. (1998). Big Five personality dimensions and job performance in army and civil occupations: A European perspective. *Human Performance*, 11, 271-288.
- Salgado, J.F. (2003). Predicting job performance using FFM and non-FFM personality measures. *Journal of Occupational and Organizational Psychology*, 76, 323-346.
- Sims, H.P., Jr. and Manz, C.C. (1996) *Company of Heroes: Unleashing the Power of Self-Leadership*. New York: John Wiley & Sons, Inc.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124, 262-274.
- Small, E.E., & Diefendorff, J.M. (2006) The Impact of Contextual Self-Ratings and Observer Ratings of Personality on the Personality-Performance Relationship. *Journal of Applied Social Psychology*, 36 (2), 297-320.
- Smircich, L. & Morgan, G. (1982). Leadership: The management of meaning. *Journal of Applied Behavioral Science*, 18, 257-273.
- Society for Industrial and Organizational Psychology (2004). Principles for the Validation and Use of Personnel Selection Procedures. Internet site: http://www.siop.org/_Principles/principlesdefault.htm
- Soucier, G. & Goldberg, L.R. (2002). Assessing the Big Five: Applications of 10 psychometric criteria to the development of marker scales. In Boele de Raad (Ed.). *Big Five Assessment*. Ashland, OH: Hogrefe & Huber.
- Soucier, G., Ostendorf, F., & Peabody, D. (2001). The non-evaluative circumplex of personality adjectives. *Journal of Personality*, 69, 537-582.

- Spinner, B (2004). *Multiple Regression and Correlation: A Workshop on Multiple Regression Analysis*. Prepared for Directorate of Human Resources Research and Evaluation, Ottawa, Canada.
- Steere, W.C., Jr (1996) Key Leadership Challenges for Present and Future Executives, In: Hesselbein, F., Goldsmith, M. and Beckhard, R. (Eds.). *The Leader of the Future. New Visions, Strategies, and Practices for the Next Area*. San Francisco: Jossey-Bass.
- Sternberg, R. J. (1985). *Beyond IQ: A Triarchic Theory of Intelligence*. Cambridge: Cambridge University Press.
- Stogdill, R.M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, 25, 35-71.
- Stogdill, R.M. (1974). *Handbook of leadership*. New York: Free Press
- Stokes-Hendricks, T.L. (2002). Individual Differences: A Review. *Defence R&D Canada, Technical Report, DCIEM TR 2001-010*. Toronto, ON.
- Sumer, H.C., Sumer, N., Demirutku, K., & Cifci, O.S. (2001). Using a personality-oriented job analysis to identify attributes to be assessed in officer selection. *Military Psychology*, 13, 129-147.
- Tabachnick, G.G., & Fidell, L.S. (1989). *Using Multivariate Statistics* (2nd Ed.). New York: Harper Collins Publishers.
- Terpstra, J. (1999, November). *Changing job requirements in relation to required abilities or personality traits during a military career*. Paper presented at the 41st Annual Conference of the International Military Testing Association, Monterey.
- Tett, R.P., Jackson, D.N., and Rothstein, M. (1991). Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology*, 44, 703-742.
- Tett, R.P., Steele, J.R., & Beauregard, R.S. (2003). Broad and narrow measures on both sides of the personality-job performance relationship. *Journal of Organizational Behavior*, 24, 335-356.
- Thompson, R (1999). *The qualities of an officer*. Paper presented at the 41st Annual Conference of the International Military Testing Association, Monterey.
- Triandis, H.C., & Suh, E.M. (2002). Cultural influences on personality. *Annual Review of Psychology*, 53, 133-161.
- Tsaousis, I & Nilolaou, I.E. (2001). The stability of the five-factor model of personality in personnel selection and assessment in Greece. *International Journal of Selection and Assessment*, 9, 290-302.

- Tupes, E.C. & Christal, R.E. (1961). *Recurrent personality factors based on trait ratings*. Technical Report ASD-TR-61-97. Lackland Air Force Base, Texas: U.S. Air Force.
- Waller, N.G., & Ben-Porath, Y.S. (1987). Is it time for clinical psychology to embrace the five-factor model of personality? *American Psychologist*, 42, 887-889.
- Weick, Karl E. (1993) *Administrative Science Quarterly*, 38, 628-652.
- Wenck, K.W., (2003). *Capstone Canadian Forces Leadership Manual Project*. Presentation to the Canadian Forces Leadership Institute, March 2003.
- Widger, W.A. & Trel, T.J. (1997). Assessment of the five-factor model of personality. *Journal of Personality Assessment*, 68, 228-250.
- Winter, D.G., & Barenbaum, N.B. (1999). History of modern personality theory and research. In Pervin, L.A., & John, O.P. (Eds.), *Handbook of Personality: Theory and Research*. New York: Guilford Press.
- Yukl, G. (2002). *Leadership in Organizations* 5th ed. Upper Saddle River, NJ: Prentice Hall.
- Yukl, G., & Van Fleet, D.D. (1991). Theory and research on leadership in organizations. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology*, Vol 2, 147-197.
- Zaccaro, S.J., Foti, R., & Kenny, D.A. (1991). Self-monitoring and trait-based variance in leadership: An investigation of leader flexibility across multiple group situations. *Journal of Applied Psychology*, 76, 308-315.

Appendix A
Leader Assessment Factors

Appendix A

Leader Assessment Factors ¹

Name of Student: _____

Leadership Attributes	Assessment	Definitions
1. Leader expressed accurate goals of the task and expected results.: Clear, concise instructions to followers. Confirmed orders, verbal expression, correctly addressed follower's questions.	1-2-3-4-5	1. = Exceptionally poor – Performance or results is significantly below standard. 2. = Unacceptable – Performance or results have not attained minimum standard. 3. = Acceptable – Performance or results have attained minimum standard. 4. = Above standard – Performance or results have exceeded standard. 5. = Exceptionally well – Performance or results clearly exceed standard with strength and ease.
2. Inspiration: The leaders ability to direct and motivate candidates in spite of their personal concerns (fatigue, hunger, discomfort, injury, stress, personal/private concerns, social problems, fear, etc).	1-2-3-4-5	
3. Directed and supported subordinates behaviors/ activities: The leader demonstrates a style of leadership appropriate to the situation (directive and/or supportive).	1-2-3-4-5	
4. Defined and maintained clear, measurable standards for the task: Personally involved when necessary. Established and adhered to control measures, corrected mistakes immediately, inspected/assessed work done.	1-2-3-4-5	
Total:	/20	

1. This form is to be used for experimental purposes only. It is to be completed after all other formal assessment has been completed and is not to be included in the formal assessment of the candidate.

Research approved iaw CANFORGEN 145/02 ADMHRMIL 079 and assigned Project #207. Contact LCol Grandmaison, Ottawa 613 995-5483 with any questions or concerns.

Appendix B

Raters Instructions for Selecting Facets

Appendix B

Raters Instructions for Selecting Facets

CF training is for the most part performance oriented. With regard to leadership development, one of the ways we assess developing leaders is through leadership stands; standardized, practical, real-world tasks. It is these tasks that represent the performance domain in the present thesis.

A 'stand' is a mission given to a group to solve. For example, given a period of time (say 4 hours) and limited resources, devise a way to recover fuel barrels from an overturned truck in a gully, and transport the fuel to a nearby location where a helicopter returning from a mission can set down and refuel. It is the leaders job to organize and direct his section to complete the mission given.

Your Task

On the next page are lists of personality traits organized as five factors (Conscientiousness, Agreeableness, Emotional Stability, Openness to Experience, and Extraversion). Each factor has subordinate traits called facets, for example, the Conscientiousness factor has the three facets of: Efficient and Dependable; Hard Working; and, Organized.

For one facet in each of the five factors on the next page, place an a. beside:

- a. the one that is most likely to best represent its personality factor; then,

For one facet in each of the five factors place a b. beside:

- b. the one that is most likely to predict a successful outcome of the leadership stand described above.

They may be the same facet or a different one for a. and b.

Example.

Conscientiousness: Sometimes called Dependability, is associated with being hard-working, achievement oriented, organized, planful, and responsible.

C1: Efficient and Dependable

C2: Hard-Working

C3: Organized

a

b

Conscientiousness: is associated with being hard-working, achievement oriented, organized, planful, and responsible.

C1: Efficient and Dependable

C2: Hard-Working

Agreeableness organized

Agreeableness: This factor describes people who are likable, soft-hearted, good-natured, courteous and trusting.

A1: Friendly

A2: Considerate

A3: Sensitive

A4: Helpful

A5: Warm and Sympathetic

Neuroticism: describes people who are insecure, overly sensitive or depressed, and generally anxious.

N1: Nervous and stressed

N2: Worrying

N3: Irritable

N4: Envious or jealous

Openness to Experience: is associated with being imaginative, cultured, intelligent, artistic and broad-minded.

O1: Philosophical

O2: Scientific Interest

O3: Creative

O4: Reflective

O5: Cultured

Extroversion: is consisting of being sociable, gregarious, and talkative.

E1: Shy

E2: Talkative

E3: Socially Active

E4: Assertive

E5: Unsociable

Appendix C

Correlation Matrices

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
leader	Pearson Correlation	1	.691**	.673**	.626**	.748**	.906**	.871**	.054
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.425
	N	219	219	219	219	219	219	219	219
insp	Pearson Correlation	.691**	1	.659**	.634**	.907**	.735**	.857**	.053
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.438
	N	219	219	219	219	219	219	219	219
support	Pearson Correlation	.673**	.659**	1	.689**	.914**	.755**	.873**	.070
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.302
	N	219	219	219	219	219	219	219	219
standard	Pearson Correlation	.626**	.634**	.689**	1	.727**	.897**	.853**	.031
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.649
	N	219	219	219	219	219	219	219	219
contextual	Pearson Correlation	.748**	.907**	.914**	.727**	1	.818**	.950**	.068
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.320
	N	219	219	219	219	219	219	219	219
task	Pearson Correlation	.906**	.735**	.755**	.897**	.818**	1	.956**	.047
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.484
	N	219	219	219	219	219	219	219	219
total	Pearson Correlation	.871**	.857**	.873**	.853**	.950**	.956**	1	.064
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.348
	N	219	219	219	219	219	219	219	219
N1 Nervous and Stressed Out	Pearson Correlation	.054	.053	.070	.031	.068	.047	.064	1
	Sig. (2-tailed)	.425	.438	.302	.649	.320	.484	.348	
	N	219	219	219	219	219	219	219	815
N2 Worrying	Pearson Correlation	.003	-.002	.025	-.024	.013	-.012	.005	.768**
	Sig. (2-tailed)	.969	.978	.712	.722	.848	.864	.938	.000
	N	219	219	219	219	219	219	219	815
N3 Irritable	Pearson Correlation	.047	-.001	.040	.004	.022	.029	.030	.598**
	Sig. (2-tailed)	.492	.993	.556	.952	.746	.673	.654	.000
	N	219	219	219	219	219	219	219	815
N4 Envious and Jealous	Pearson Correlation	-.060	-.083	-.074	-.100	-.086	-.089	-.089	.594**
	Sig. (2-tailed)	.374	.222	.276	.139	.205	.191	.188	.000
	N	219	219	219	219	219	219	219	815

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
E1 Shy and Bashful	Pearson Correlation	-.188**	-.119	-.100	-.104	-.120	-.163*	-.150*	.464**
	Sig. (2-tailed)	.005	.078	.139	.126	.075	.016	.027	.000
	N	219	219	219	219	219	219	219	815
E2 Talkative	Pearson Correlation	.131	.122	.094	.121	.119	.140*	.134*	-.167**
	Sig. (2-tailed)	.054	.071	.164	.074	.080	.039	.047	.000
	N	219	219	219	219	219	219	219	815
E3 Socially Active	Pearson Correlation	-.125	-.084	-.046	-.129	-.071	-.141*	-.113	-.248**
	Sig. (2-tailed)	.065	.213	.498	.056	.294	.037	.096	.000
	N	219	219	219	219	219	219	219	815
E4 Assertive	Pearson Correlation	-.058	.007	-.092	-.008	-.048	-.037	-.048	-.137**
	Sig. (2-tailed)	.396	.923	.176	.904	.481	.584	.483	.000
	N	219	219	219	219	219	219	219	815
E5 Unsociable	Pearson Correlation	-.031	-.056	-.033	-.054	-.049	-.047	-.049	.428**
	Sig. (2-tailed)	.645	.406	.627	.425	.472	.488	.473	.000
	N	219	219	219	219	219	219	219	815
O1 Philosophical	Pearson Correlation	.022	.068	.013	.057	.044	.043	.044	-.081*
	Sig. (2-tailed)	.752	.318	.850	.404	.520	.527	.519	.021
	N	219	219	219	219	219	219	219	815
O2 Scientific Interest	Pearson Correlation	.021	-.014	-.035	-.055	-.027	-.018	-.024	-.063
	Sig. (2-tailed)	.758	.840	.610	.418	.693	.792	.721	.074
	N	219	219	219	219	219	219	219	815
O3 Creative	Pearson Correlation	-.090	-.021	-.029	-.049	-.027	-.078	-.057	-.293**
	Sig. (2-tailed)	.184	.757	.674	.466	.688	.251	.405	.000
	N	219	219	219	219	219	219	219	815
O4 Reflective	Pearson Correlation	-.206**	-.101	-.109	-.146*	-.115	-.196**	-.168*	.110**
	Sig. (2-tailed)	.002	.138	.108	.030	.089	.004	.013	.002
	N	219	219	219	219	219	219	219	815
O5 Cultured	Pearson Correlation	.007	.037	-.016	-.006	.011	.001	.004	-.053
	Sig. (2-tailed)	.914	.587	.818	.928	.870	.990	.947	.132
	N	219	219	219	219	219	219	219	815
A1 Friendly	Pearson Correlation	.000	.090	.030	.071	.065	.039	.053	-.309**
	Sig. (2-tailed)	1.000	.185	.655	.293	.336	.569	.434	.000
	N	219	219	219	219	219	219	219	813

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
A2 Considerate	Pearson Correlation	.082	.076	.132	.142*	.115	.123	.124	-.097**
	Sig. (2-tailed)	.229	.263	.050	.036	.089	.069	.066	.006
	N	219	219	219	219	219	219	219	813
A3 Cold and Insensitive	Pearson Correlation	.042	.039	.102	.142*	.078	.101	.092	-.251**
	Sig. (2-tailed)	.537	.571	.135	.036	.254	.139	.176	.000
	N	218	218	218	218	218	218	218	813
A4 Helpful	Pearson Correlation	-.049	.000	.044	.032	.025	-.011	.005	-.150**
	Sig. (2-tailed)	.470	.997	.522	.642	.718	.874	.944	.000
	N	219	219	219	219	219	219	219	815
A5 Warm and Sympathetic	Pearson Correlation	-.056	-.036	.007	.004	-.016	-.030	-.025	-.182**
	Sig. (2-tailed)	.407	.592	.923	.953	.815	.661	.712	.000
	N	219	219	219	219	219	219	219	814
C1 Efficient and Dependable	Pearson Correlation	-.186**	-.127	-.136*	-.080	-.144*	-.149*	-.155*	-.409**
	Sig. (2-tailed)	.006	.061	.045	.238	.033	.027	.022	.000
	N	219	219	219	219	219	219	219	814
C2 Hard Working	Pearson Correlation	-.133*	-.060	-.056	-.040	-.063	-.097	-.086	-.382**
	Sig. (2-tailed)	.050	.377	.412	.561	.350	.153	.204	.000
	N	219	219	219	219	219	219	219	815
C3 Organized	Pearson Correlation	-.138*	-.073	-.097	-.059	-.094	-.110	-.108	-.277**
	Sig. (2-tailed)	.041	.285	.151	.387	.168	.103	.111	.000
	N	219	219	219	219	219	219	219	815
Scores for N_IPIP	Pearson Correlation	-.025	.014	-.013	-.067	.000	-.050	-.023	.748**
	Sig. (2-tailed)	.717	.838	.847	.330	.999	.464	.735	.000
	N	215	215	215	215	215	215	215	793
Scores for E_IPIP	Pearson Correlation	.139*	.093	.091	.080	.101	.122	.117	-.346**
	Sig. (2-tailed)	.042	.176	.185	.242	.141	.073	.087	.000
	N	215	215	215	215	215	215	215	794
Scores for O_IPIP	Pearson Correlation	.006	.024	-.002	.000	.012	.003	.005	-.277**
	Sig. (2-tailed)	.926	.725	.980	.997	.861	.960	.943	.000
	N	215	215	215	215	215	215	215	795
Scores for A_IPIP	Pearson Correlation	.049	.016	.090	.070	.059	.066	.063	-.166**
	Sig. (2-tailed)	.477	.812	.188	.306	.385	.338	.356	.000
	N	215	215	215	215	215	215	215	794

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Scores for C_IPIP	Pearson Correlation	-.072	-.095	-.079	-.003	-.095	-.043	-.073	-.447**
	Sig. (2-tailed)	.293	.167	.246	.964	.163	.535	.289	.000
	N	215	215	215	215	215	215	215	793
Scores for N_TSD	Pearson Correlation	.035	.011	.027	-.001	.021	.019	.024	.921**
	Sig. (2-tailed)	.630	.880	.711	.988	.774	.796	.739	.000
	N	189	189	189	189	189	189	189	690
Scores for E_TSD	Pearson Correlation	.120	.099	.054	.038	.082	.088	.089	-.449**
	Sig. (2-tailed)	.096	.171	.458	.599	.257	.222	.216	.000
	N	193	193	193	193	193	193	193	702
Scores for O_TSD	Pearson Correlation	-.059	-.005	-.016	-.007	-.011	-.037	-.029	-.076*
	Sig. (2-tailed)	.413	.948	.824	.923	.874	.609	.686	.043
	N	195	195	195	195	195	195	195	720
Scores for A_TSD	Pearson Correlation	.019	.018	.044	.083	.034	.055	.044	-.311**
	Sig. (2-tailed)	.796	.805	.548	.254	.642	.449	.542	.000
	N	192	192	192	192	192	192	192	704
Scores for C_TSD	Pearson Correlation	-.205**	-.134	-.175*	-.091	-.169*	-.165*	-.177*	-.407**
	Sig. (2-tailed)	.004	.061	.015	.203	.018	.021	.013	.000
	N	195	195	195	195	195	195	195	712
vs_perc	Pearson Correlation	.122	.034	.143	.136	.102	.150	.130	.043
	Sig. (2-tailed)	.176	.705	.114	.131	.260	.096	.149	.260
	N	124	124	124	124	124	124	124	674
sa_perc	Pearson Correlation	.174	.038	.176	.144	.123	.186*	.169	.000
	Sig. (2-tailed)	.053	.673	.051	.110	.173	.039	.061	.995
	N	124	124	124	124	124	124	124	674
ps_perc	Pearson Correlation	.265**	.185*	.212*	.125	.225*	.230*	.240**	.046
	Sig. (2-tailed)	.003	.039	.018	.167	.012	.010	.007	.228
	N	124	124	124	124	124	124	124	674
tot_perc	Pearson Correlation	.258**	.146	.211*	.150	.203*	.239**	.234**	.035
	Sig. (2-tailed)	.004	.105	.019	.096	.024	.007	.009	.358
	N	124	124	124	124	124	124	124	674
gender	Pearson Correlation	-.146*	-.031	-.068	-.097	-.055	-.136	-.100	-.024
	Sig. (2-tailed)	.036	.654	.330	.166	.430	.051	.153	.506
	N	207	207	207	207	207	207	207	768

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Birth_Yr	Pearson Correlation	-.180*	-.211*	-.098	-.162	-.168*	-.188*	-.191*	.020
	Sig. (2-tailed)	.030	.011	.239	.051	.042	.023	.021	.769
	N	146	146	146	146	146	146	146	219
edulevel	Pearson Correlation	.292*	.276*	.350**	.452**	.366**	.447**	.432**	.104
	Sig. (2-tailed)	.029	.039	.008	.000	.006	.001	.001	.305
	N	56	56	56	56	56	56	56	99
language	Pearson Correlation	.288*	.121	.166	-.111	.162	.108	.138	.100
	Sig. (2-tailed)	.027	.362	.209	.401	.221	.415	.297	.314
	N	59	59	59	59	59	59	59	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
leader	Pearson Correlation	.003	.047	-.060	-.188**	.131	-.125	-.058
	Sig. (2-tailed)	.969	.492	.374	.005	.054	.065	.396
	N	219	219	219	219	219	219	219
insp	Pearson Correlation	-.002	-.001	-.083	-.119	.122	-.084	.007
	Sig. (2-tailed)	.978	.993	.222	.078	.071	.213	.923
	N	219	219	219	219	219	219	219
support	Pearson Correlation	.025	.040	-.074	-.100	.094	-.046	-.092
	Sig. (2-tailed)	.712	.556	.276	.139	.164	.498	.176
	N	219	219	219	219	219	219	219
standard	Pearson Correlation	-.024	.004	-.100	-.104	.121	-.129	-.008
	Sig. (2-tailed)	.722	.952	.139	.126	.074	.056	.904
	N	219	219	219	219	219	219	219
contextual	Pearson Correlation	.013	.022	-.086	-.120	.119	-.071	-.048
	Sig. (2-tailed)	.848	.746	.205	.075	.080	.294	.481
	N	219	219	219	219	219	219	219
task	Pearson Correlation	-.012	.029	-.089	-.163*	.140*	-.141*	-.037
	Sig. (2-tailed)	.864	.673	.191	.016	.039	.037	.584
	N	219	219	219	219	219	219	219
total	Pearson Correlation	.005	.030	-.089	-.150*	.134*	-.113	-.048
	Sig. (2-tailed)	.938	.654	.188	.027	.047	.096	.483
	N	219	219	219	219	219	219	219
N1 Nervous and Stressed Out	Pearson Correlation	.768**	.598**	.594**	.464**	-.167**	-.248**	-.137**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	815	815	815	815	815	815	815
N2 Worrying	Pearson Correlation	1	.582**	.580**	.545**	-.178**	-.233**	-.119**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.001
	N	816	816	816	816	816	816	816
N3 Irritable	Pearson Correlation	.582**	1	.625**	.340**	-.097**	-.151**	-.048
	Sig. (2-tailed)	.000		.000	.000	.005	.000	.167
	N	816	816	816	816	816	816	816
N4 Envious and Jealous	Pearson Correlation	.580**	.625**	1	.350**	-.101**	-.089*	-.055
	Sig. (2-tailed)	.000	.000		.000	.004	.011	.119
	N	816	816	816	816	816	816	816

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
E1 Shy and Bashful	Pearson Correlation	.545**	.340**	.350**	1	-.560**	-.483**	-.043
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.215
	N	816	816	816	816	816	816	816
E2 Talkative	Pearson Correlation	-.178**	-.097**	-.101**	-.560**	1	.592**	.185**
	Sig. (2-tailed)	.000	.005	.004	.000		.000	.000
	N	816	816	816	816	816	816	816
E3 Socially Active	Pearson Correlation	-.233**	-.151**	-.089*	-.483**	.592**	1	.147**
	Sig. (2-tailed)	.000	.000	.011	.000	.000		.000
	N	816	816	816	816	816	816	816
E4 Assertive	Pearson Correlation	-.119**	-.048	-.055	-.043	.185**	.147**	1
	Sig. (2-tailed)	.001	.167	.119	.215	.000	.000	
	N	816	816	816	816	816	816	816
E5 Unsociable	Pearson Correlation	.459**	.346**	.338**	.646**	-.567**	-.626**	-.094**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.007
	N	816	816	816	816	816	816	816
O1 Philosophical	Pearson Correlation	-.058	-.086*	-.117**	-.089*	.127**	-.002	.448**
	Sig. (2-tailed)	.097	.014	.001	.011	.000	.949	.000
	N	816	816	816	816	816	816	816
O2 Scientific Interest	Pearson Correlation	-.015	-.090*	-.016	-.076*	.098**	.112**	.349**
	Sig. (2-tailed)	.676	.010	.647	.031	.005	.001	.000
	N	816	816	816	816	816	816	816
O3 Creative	Pearson Correlation	-.231**	-.214**	-.254**	-.284**	.262**	.349**	.256**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	816	816	816	816	816	816	816
O4 Reflective	Pearson Correlation	.113**	.024	.056	.072*	.072*	.052	.307**
	Sig. (2-tailed)	.001	.499	.109	.041	.039	.134	.000
	N	816	816	816	816	816	816	816
O5 Cultured	Pearson Correlation	-.081*	-.094**	-.123**	-.071*	.044	-.008	.250**
	Sig. (2-tailed)	.021	.007	.000	.043	.211	.829	.000
	N	815	815	815	815	815	815	815
A1 Friendly	Pearson Correlation	-.259**	-.358**	-.267**	-.307**	.447**	.498**	.044
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.206
	N	813	813	813	813	813	813	813

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
A2 Considerate	Pearson Correlation	-.046	-.259**	-.249**	-.027	.214**	.191**	.007
	Sig. (2-tailed)	.188	.000	.000	.442	.000	.000	.839
	N	813	813	813	813	813	813	813
A3 Cold and Insensitive	Pearson Correlation	-.281**	-.448**	-.429**	-.312**	.300**	.197**	-.040
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.257
	N	814	814	814	814	814	814	814
A4 Helpful	Pearson Correlation	-.086*	-.179**	-.200**	-.156**	.323**	.336**	.052
	Sig. (2-tailed)	.014	.000	.000	.000	.000	.000	.141
	N	816	816	816	816	816	816	816
A5 Warm and Sympathetic	Pearson Correlation	-.174**	-.263**	-.304**	-.204**	.388**	.334**	.076*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.031
	N	815	815	815	815	815	815	815
C1 Efficient and Dependable	Pearson Correlation	-.346**	-.328**	-.369**	-.242**	.210**	.262**	.117**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001
	N	815	815	815	815	815	815	815
C2 Hard Working	Pearson Correlation	-.262**	-.238**	-.283**	-.232**	.241**	.347**	.159**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	816	816	816	816	816	816	816
C3 Organized	Pearson Correlation	-.178**	-.161**	-.194**	-.182**	.173**	.284**	.061
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.082
	N	816	816	816	816	816	816	816
Scores for N_IPIP	Pearson Correlation	.723**	.693**	.589**	.395**	-.179**	-.215**	-.119**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001
	N	793	793	793	793	793	793	793
Scores for E_IPIP	Pearson Correlation	-.345**	-.200**	-.173**	-.733**	.736**	.727**	.219**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	794	794	794	794	794	794	794
Scores for O_IPIP	Pearson Correlation	-.263**	-.223**	-.178**	-.290**	.236**	.189**	.377**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	795	795	795	795	795	795	795
Scores for A_IPIP	Pearson Correlation	-.156**	-.293**	-.264**	-.243**	.384**	.356**	.116**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001
	N	794	794	794	794	794	794	794

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Scores for C_IPIP	Pearson Correlation	-.326**	-.314**	-.328**	-.218**	.118**	.206**	.124**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.000
	N	793	793	793	793	793	793	793
Scores for N_TSD	Pearson Correlation	.877**	.819**	.773**	.505**	-.175**	-.250**	-.112**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.003
	N	690	690	690	690	690	690	690
Scores for E_TSD	Pearson Correlation	-.509**	-.352**	-.335**	-.902**	.782**	.749**	.182**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	702	702	702	702	702	702	702
Scores for O_TSD	Pearson Correlation	-.038	-.093*	-.098**	-.114**	.159**	.093*	.484**
	Sig. (2-tailed)	.313	.012	.008	.002	.000	.013	.000
	N	720	720	720	720	720	720	720
Scores for A_TSD	Pearson Correlation	-.265**	-.426**	-.411**	-.294**	.455**	.419**	.042
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.261
	N	704	704	704	704	704	704	704
Scores for C_TSD	Pearson Correlation	-.299**	-.287**	-.341**	-.256**	.243**	.313**	.141**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	712	712	712	712	712	712	712
vs_perc	Pearson Correlation	.058	.078*	.108**	-.005	.000	.050	-.028
	Sig. (2-tailed)	.130	.042	.005	.907	.997	.194	.462
	N	675	675	675	675	675	675	675
sa_perc	Pearson Correlation	-.007	.010	-.026	.006	-.023	.000	.003
	Sig. (2-tailed)	.849	.804	.504	.875	.544	.996	.941
	N	675	675	675	675	675	675	675
ps_perc	Pearson Correlation	.072	.089*	.094*	.024	-.045	-.042	.001
	Sig. (2-tailed)	.063	.021	.014	.530	.244	.274	.969
	N	675	675	675	675	675	675	675
tot_perc	Pearson Correlation	.058	.080*	.079*	.012	-.033	-.005	-.018
	Sig. (2-tailed)	.135	.037	.040	.748	.389	.892	.647
	N	675	675	675	675	675	675	675
gender	Pearson Correlation	-.041	-.032	-.016	-.020	-.036	.033	-.033
	Sig. (2-tailed)	.261	.380	.662	.579	.315	.367	.358
	N	769	769	769	769	769	769	769

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Birth_Yr	Pearson Correlation	.026	.026	.103	.169*	.012	.061	-.078
	Sig. (2-tailed)	.703	.697	.129	.012	.856	.372	.251
	N	219	219	219	219	219	219	219
edulevel	Pearson Correlation	.121	.175	-.092	.060	-.145	-.130	.167
	Sig. (2-tailed)	.232	.082	.366	.553	.153	.199	.099
	N	99	99	99	99	99	99	99
language	Pearson Correlation	.080	.098	-.052	-.097	.063	.022	-.133
	Sig. (2-tailed)	.420	.324	.602	.329	.524	.823	.180
	N	103	103	103	103	103	103	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
leader	Pearson Correlation	-.031	.022	.021	-.090	-.206**	.007	.000
	Sig. (2-tailed)	.645	.752	.758	.184	.002	.914	1.000
	N	219	219	219	219	219	219	219
insp	Pearson Correlation	-.056	.068	-.014	-.021	-.101	.037	.090
	Sig. (2-tailed)	.406	.318	.840	.757	.138	.587	.185
	N	219	219	219	219	219	219	219
support	Pearson Correlation	-.033	.013	-.035	-.029	-.109	-.016	.030
	Sig. (2-tailed)	.627	.850	.610	.674	.108	.818	.655
	N	219	219	219	219	219	219	219
standard	Pearson Correlation	-.054	.057	-.055	-.049	-.146*	-.006	.071
	Sig. (2-tailed)	.425	.404	.418	.466	.030	.928	.293
	N	219	219	219	219	219	219	219
contextual	Pearson Correlation	-.049	.044	-.027	-.027	-.115	.011	.065
	Sig. (2-tailed)	.472	.520	.693	.688	.089	.870	.336
	N	219	219	219	219	219	219	219
task	Pearson Correlation	-.047	.043	-.018	-.078	-.196**	.001	.039
	Sig. (2-tailed)	.488	.527	.792	.251	.004	.990	.569
	N	219	219	219	219	219	219	219
total	Pearson Correlation	-.049	.044	-.024	-.057	-.168*	.004	.053
	Sig. (2-tailed)	.473	.519	.721	.405	.013	.947	.434
	N	219	219	219	219	219	219	219
N1 Nervous and Stressed Out	Pearson Correlation	.428**	-.081*	-.063	-.293**	.110**	-.053	-.309**
	Sig. (2-tailed)	.000	.021	.074	.000	.002	.132	.000
	N	815	815	815	815	815	815	813
N2 Worrying	Pearson Correlation	.459**	-.058	-.015	-.231**	.113**	-.081*	-.259**
	Sig. (2-tailed)	.000	.097	.676	.000	.001	.021	.000
	N	816	816	816	816	816	815	813
N3 Irritable	Pearson Correlation	.346**	-.086*	-.090*	-.214**	.024	-.094**	-.358**
	Sig. (2-tailed)	.000	.014	.010	.000	.499	.007	.000
	N	816	816	816	816	816	815	813
N4 Envious and Jealous	Pearson Correlation	.338**	-.117**	-.016	-.254**	.056	-.123**	-.267**
	Sig. (2-tailed)	.000	.001	.647	.000	.109	.000	.000
	N	816	816	816	816	816	815	813

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
E1 Shy and Bashful	Pearson Correlation	.646**	-.089*	-.076*	-.284**	.072*	-.071*	-.307**
	Sig. (2-tailed)	.000	.011	.031	.000	.041	.043	.000
	N	816	816	816	816	816	815	813
E2 Talkative	Pearson Correlation	-.567**	.127**	.098**	.262**	.072*	.044	.447**
	Sig. (2-tailed)	.000	.000	.005	.000	.039	.211	.000
	N	816	816	816	816	816	815	813
E3 Socially Active	Pearson Correlation	-.626**	-.002	.112**	.349**	.052	-.008	.498**
	Sig. (2-tailed)	.000	.949	.001	.000	.134	.829	.000
	N	816	816	816	816	816	815	813
E4 Assertive	Pearson Correlation	-.094**	.448**	.349**	.256**	.307**	.250**	.044
	Sig. (2-tailed)	.007	.000	.000	.000	.000	.000	.206
	N	816	816	816	816	816	815	813
E5 Unsociable	Pearson Correlation	1	.014	.023	-.294**	.077*	.008	-.479**
	Sig. (2-tailed)		.684	.521	.000	.029	.820	.000
	N	816	816	816	816	816	815	813
O1 Philosophical	Pearson Correlation	.014	1	.644**	.357**	.596**	.503**	.056
	Sig. (2-tailed)	.684		.000	.000	.000	.000	.109
	N	816	816	816	816	816	815	813
O2 Scientific Interest	Pearson Correlation	.023	.644**	1	.359**	.513**	.458**	.083*
	Sig. (2-tailed)	.521	.000		.000	.000	.000	.019
	N	816	816	816	816	816	815	813
O3 Creative	Pearson Correlation	-.294**	.357**	.359**	1	.299**	.271**	.325**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	816	816	816	816	816	815	813
O4 Reflective	Pearson Correlation	.077*	.596**	.513**	.299**	1	.344**	.066
	Sig. (2-tailed)	.029	.000	.000	.000		.000	.059
	N	816	816	816	816	816	815	813
O5 Cultured	Pearson Correlation	.008	.503**	.458**	.271**	.344**	1	-.029
	Sig. (2-tailed)	.820	.000	.000	.000	.000		.412
	N	815	815	815	815	815	815	813
A1 Friendly	Pearson Correlation	-.479**	.056	.083*	.325**	.066	-.029	1
	Sig. (2-tailed)	.000	.109	.019	.000	.059	.412	
	N	813	813	813	813	813	813	813

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
A2 Considerate	Pearson Correlation	-.143**	.129**	.127**	.181**	.127**	.055	.560**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.119	.000
	N	813	813	813	813	813	813	813
A3 Cold and Insensitive	Pearson Correlation	-.434**	.059	-.045	.183**	-.009	.039	.416**
	Sig. (2-tailed)	.000	.092	.200	.000	.788	.263	.000
	N	814	814	814	814	814	813	811
A4 Helpful	Pearson Correlation	-.267**	.100**	.097**	.264**	.150**	.055	.473**
	Sig. (2-tailed)	.000	.004	.006	.000	.000	.117	.000
	N	816	816	816	816	816	815	813
A5 Warm and Sympathetic	Pearson Correlation	-.413**	.141**	.063	.329**	.147**	.074*	.552**
	Sig. (2-tailed)	.000	.000	.074	.000	.000	.035	.000
	N	815	815	815	815	815	814	812
C1 Efficient and Dependable	Pearson Correlation	-.394**	.119**	.072*	.410**	.125**	.088*	.340**
	Sig. (2-tailed)	.000	.001	.040	.000	.000	.012	.000
	N	815	815	815	815	815	814	812
C2 Hard Working	Pearson Correlation	-.295**	.150**	.143**	.381**	.125**	.097**	.397**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.006	.000
	N	816	816	816	816	816	815	813
C3 Organized	Pearson Correlation	-.270**	.067	.088*	.349**	.092**	.077*	.311**
	Sig. (2-tailed)	.000	.056	.012	.000	.008	.027	.000
	N	816	816	816	816	816	815	813
Scores for N_IPIP	Pearson Correlation	.382**	-.134**	-.088*	-.251**	.064	-.120**	-.381**
	Sig. (2-tailed)	.000	.000	.014	.000	.073	.001	.000
	N	793	793	793	793	793	793	792
Scores for E_IPIP	Pearson Correlation	-.702**	.102**	.128**	.365**	.019	.085*	.459**
	Sig. (2-tailed)	.000	.004	.000	.000	.599	.017	.000
	N	794	794	794	794	794	794	793
Scores for O_IPIP	Pearson Correlation	-.196**	.625**	.520**	.531**	.463**	.393**	.188**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	795	795	795	795	795	795	793
Scores for A_IPIP	Pearson Correlation	-.371**	.151**	.097**	.270**	.164**	.098**	.490**
	Sig. (2-tailed)	.000	.000	.006	.000	.000	.005	.000
	N	794	794	794	794	794	794	793

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Scores for C_IPIP	Pearson Correlation	-.262**	.114**	.103**	.296**	.060	.120**	.271**
	Sig. (2-tailed)	.000	.001	.004	.000	.093	.001	.000
	N	793	793	793	793	793	793	792
Scores for N_TSD	Pearson Correlation	.460**	-.090*	-.062	-.292**	.106**	-.096*	-.360**
	Sig. (2-tailed)	.000	.018	.103	.000	.005	.012	.000
	N	690	690	690	690	690	690	690
Scores for E_TSD	Pearson Correlation	-.823**	.105**	.124**	.377**	-.023	.092*	.479**
	Sig. (2-tailed)	.000	.005	.001	.000	.537	.015	.000
	N	702	702	702	702	702	702	702
Scores for O_TSD	Pearson Correlation	-.014	.902**	.831**	.535**	.754**	.629**	.094*
	Sig. (2-tailed)	.712	.000	.000	.000	.000	.000	.012
	N	720	720	720	720	720	720	720
Scores for A_TSD	Pearson Correlation	-.495**	.131**	.067	.341**	.090*	.061	.755**
	Sig. (2-tailed)	.000	.000	.075	.000	.017	.108	.000
	N	704	704	704	704	704	704	704
Scores for C_TSD	Pearson Correlation	-.352**	.121**	.117**	.418**	.122**	.109**	.382**
	Sig. (2-tailed)	.000	.001	.002	.000	.001	.003	.000
	N	712	712	712	712	712	712	712
vs_perc	Pearson Correlation	-.028	-.014	-.014	.042	.031	.001	-.013
	Sig. (2-tailed)	.473	.712	.717	.272	.420	.982	.743
	N	675	675	675	675	675	674	672
sa_perc	Pearson Correlation	.019	-.011	-.040	.072	.038	-.031	-.008
	Sig. (2-tailed)	.623	.778	.299	.063	.327	.414	.832
	N	675	675	675	675	675	674	672
ps_perc	Pearson Correlation	.051	.059	.024	.012	.062	.040	-.062
	Sig. (2-tailed)	.187	.128	.530	.761	.108	.294	.106
	N	675	675	675	675	675	674	672
tot_perc	Pearson Correlation	.027	.032	.006	.057	.066	.024	-.042
	Sig. (2-tailed)	.487	.412	.879	.140	.086	.541	.275
	N	675	675	675	675	675	674	672
gender	Pearson Correlation	-.028	-.013	.031	-.022	-.011	.057	.002
	Sig. (2-tailed)	.444	.723	.398	.549	.756	.116	.960
	N	769	769	769	769	769	768	766

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Birth_Yr	Pearson Correlation	.015	-.102	-.075	.098	.038	-.177**	.054
	Sig. (2-tailed)	.829	.132	.270	.149	.573	.009	.425
	N	219	219	219	219	219	219	219
edulevel	Pearson Correlation	.049	.155	.071	.143	.020	.163	-.192
	Sig. (2-tailed)	.628	.125	.487	.159	.842	.108	.057
	N	99	99	99	99	99	99	99
language	Pearson Correlation	.058	.064	.105	-.001	-.025	.000	-.010
	Sig. (2-tailed)	.558	.523	.290	.988	.799	.998	.921
	N	103	103	103	103	103	103	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
leader	Pearson Correlation	.082	.042	-.049	-.056	-.186**	-.133*	-.138*
	Sig. (2-tailed)	.229	.537	.470	.407	.006	.050	.041
	N	219	218	219	219	219	219	219
insp	Pearson Correlation	.076	.039	.000	-.036	-.127	-.060	-.073
	Sig. (2-tailed)	.263	.571	.997	.592	.061	.377	.285
	N	219	218	219	219	219	219	219
support	Pearson Correlation	.132	.102	.044	.007	-.136*	-.056	-.097
	Sig. (2-tailed)	.050	.135	.522	.923	.045	.412	.151
	N	219	218	219	219	219	219	219
standard	Pearson Correlation	.142*	.142*	.032	.004	-.080	-.040	-.059
	Sig. (2-tailed)	.036	.036	.642	.953	.238	.561	.387
	N	219	218	219	219	219	219	219
contextual	Pearson Correlation	.115	.078	.025	-.016	-.144*	-.063	-.094
	Sig. (2-tailed)	.089	.254	.718	.815	.033	.350	.168
	N	219	218	219	219	219	219	219
task	Pearson Correlation	.123	.101	-.011	-.030	-.149*	-.097	-.110
	Sig. (2-tailed)	.069	.139	.874	.661	.027	.153	.103
	N	219	218	219	219	219	219	219
total	Pearson Correlation	.124	.092	.005	-.025	-.155*	-.086	-.108
	Sig. (2-tailed)	.066	.176	.944	.712	.022	.204	.111
	N	219	218	219	219	219	219	219
N1 Nervous and Stressed Out	Pearson Correlation	-.097**	-.251**	-.150**	-.182**	-.409**	-.382**	-.277**
	Sig. (2-tailed)	.006	.000	.000	.000	.000	.000	.000
	N	813	813	815	814	814	815	815
N2 Worrying	Pearson Correlation	-.046	-.281**	-.086*	-.174**	-.346**	-.262**	-.178**
	Sig. (2-tailed)	.188	.000	.014	.000	.000	.000	.000
	N	813	814	816	815	815	816	816
N3 Irritable	Pearson Correlation	-.259**	-.448**	-.179**	-.263**	-.328**	-.238**	-.161**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	813	814	816	815	815	816	816
N4 Envious and Jealous	Pearson Correlation	-.249**	-.429**	-.200**	-.304**	-.369**	-.283**	-.194**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	813	814	816	815	815	816	816

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
E1 Shy and Bashful	Pearson Correlation	-.027	-.312**	-.156**	-.204**	-.242**	-.232**	-.182**
	Sig. (2-tailed)	.442	.000	.000	.000	.000	.000	.000
	N	813	814	816	815	815	816	816
E2 Talkative	Pearson Correlation	.214**	.300**	.323**	.388**	.210**	.241**	.173**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	813	814	816	815	815	816	816
E3 Socially Active	Pearson Correlation	.191**	.197**	.336**	.334**	.262**	.347**	.284**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	813	814	816	815	815	816	816
E4 Assertive	Pearson Correlation	.007	-.040	.052	.076*	.117**	.159**	.061
	Sig. (2-tailed)	.839	.257	.141	.031	.001	.000	.082
	N	813	814	816	815	815	816	816
E5 Unsociable	Pearson Correlation	-.143**	-.434**	-.267**	-.413**	-.394**	-.295**	-.270**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	813	814	816	815	815	816	816
O1 Philosophical	Pearson Correlation	.129**	.059	.100**	.141**	.119**	.150**	.067
	Sig. (2-tailed)	.000	.092	.004	.000	.001	.000	.056
	N	813	814	816	815	815	816	816
O2 Scientific Interest	Pearson Correlation	.127**	-.045	.097**	.063	.072*	.143**	.088*
	Sig. (2-tailed)	.000	.200	.006	.074	.040	.000	.012
	N	813	814	816	815	815	816	816
O3 Creative	Pearson Correlation	.181**	.183**	.264**	.329**	.410**	.381**	.349**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	813	814	816	815	815	816	816
O4 Reflective	Pearson Correlation	.127**	-.009	.150**	.147**	.125**	.125**	.092**
	Sig. (2-tailed)	.000	.788	.000	.000	.000	.000	.008
	N	813	814	816	815	815	816	816
O5 Cultured	Pearson Correlation	.055	.039	.055	.074*	.088*	.097**	.077*
	Sig. (2-tailed)	.119	.263	.117	.035	.012	.006	.027
	N	813	813	815	814	814	815	815
A1 Friendly	Pearson Correlation	.560**	.416**	.473**	.552**	.340**	.397**	.311**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	813	811	813	812	812	813	813

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
A2 Considerate	Pearson Correlation	1	.407**	.548**	.543**	.225**	.320**	.228**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	813	811	813	812	812	813	813
A3 Cold and Insensitive	Pearson Correlation	.407**	1	.410**	.616**	.315**	.225**	.182**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	811	814	814	814	814	814	814
A4 Helpful	Pearson Correlation	.548**	.410**	1	.587**	.289**	.363**	.289**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	813	814	816	815	815	816	816
A5 Warm and Sympathetic	Pearson Correlation	.543**	.616**	.587**	1	.514**	.347**	.357**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	812	814	815	815	815	815	815
C1 Efficient and Dependable	Pearson Correlation	.225**	.315**	.289**	.514**	1	.565**	.644**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	812	814	815	815	815	815	815
C2 Hard Working	Pearson Correlation	.320**	.225**	.363**	.347**	.565**	1	.636**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	813	814	816	815	815	816	816
C3 Organized	Pearson Correlation	.228**	.182**	.289**	.357**	.644**	.636**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	813	814	816	815	815	816	816
Scores for N_IPIP	Pearson Correlation	-.189**	-.285**	-.114**	-.204**	-.360**	-.275**	-.177**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.000
	N	792	791	793	792	792	793	793
Scores for E_IPIP	Pearson Correlation	.110**	.277**	.282**	.290**	.214**	.274**	.212**
	Sig. (2-tailed)	.002	.000	.000	.000	.000	.000	.000
	N	793	792	794	793	793	794	794
Scores for O_IPIP	Pearson Correlation	.070*	.116**	.133**	.160**	.231**	.197**	.092**
	Sig. (2-tailed)	.048	.001	.000	.000	.000	.000	.009
	N	793	793	795	794	794	795	795
Scores for A_IPIP	Pearson Correlation	.546**	.542**	.591**	.602**	.286**	.311**	.240**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	792	794	793	793	794	794

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Scores for C_IPIP	Pearson Correlation	.222**	.227**	.228**	.272**	.593**	.643**	.743**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	792	791	793	792	792	793	793
Scores for N_TSD	Pearson Correlation	-.175**	-.389**	-.168**	-.259**	-.426**	-.350**	-.233**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	690	690	690	690	690	690	690
Scores for E_TSD	Pearson Correlation	.148**	.382**	.299**	.356**	.330**	.352**	.264**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	702	702	702	702	702	702	702
Scores for O_TSD	Pearson Correlation	.148**	.037	.136**	.170**	.168**	.211**	.129**
	Sig. (2-tailed)	.000	.326	.000	.000	.000	.000	.001
	N	720	720	720	720	720	720	720
Scores for A_TSD	Pearson Correlation	.755**	.766**	.713**	.879**	.473**	.424**	.332**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	704	704	704	704	704	704	704
Scores for C_TSD	Pearson Correlation	.295**	.283**	.354**	.484**	.881**	.803**	.894**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	712	712	712	712	712	712	712
vs_perc	Pearson Correlation	-.060	.007	.019	-.010	.034	.014	.065
	Sig. (2-tailed)	.117	.852	.621	.804	.383	.720	.090
	N	672	673	675	674	674	675	675
sa_perc	Pearson Correlation	-.019	.004	.049	.024	.053	.015	.045
	Sig. (2-tailed)	.619	.913	.208	.538	.169	.691	.248
	N	672	673	675	674	674	675	675
ps_perc	Pearson Correlation	-.086*	-.062	.009	-.029	-.007	-.051	-.001
	Sig. (2-tailed)	.026	.106	.814	.455	.851	.184	.974
	N	672	673	675	674	674	675	675
tot_perc	Pearson Correlation	-.079*	-.027	.035	-.010	.030	-.018	.040
	Sig. (2-tailed)	.042	.484	.365	.793	.437	.648	.301
	N	672	673	675	674	674	675	675
gender	Pearson Correlation	.029	-.045	.023	-.037	-.059	-.087*	-.050
	Sig. (2-tailed)	.418	.213	.528	.308	.102	.016	.168
	N	766	767	769	768	768	769	769

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Birth_Yr	Pearson Correlation	-.023	.022	.089	.037	.036	.042	.082
	Sig. (2-tailed)	.735	.741	.188	.584	.592	.532	.225
	N	219	219	219	219	219	219	219
edulevel	Pearson Correlation	-.016	.036	-.042	-.003	-.011	.051	.009
	Sig. (2-tailed)	.872	.725	.681	.976	.916	.614	.926
	N	99	99	99	99	99	99	99
language	Pearson Correlation	.035	.143	-.040	.010	-.124	.023	.005
	Sig. (2-tailed)	.726	.148	.686	.920	.213	.819	.960
	N	103	103	103	103	103	103	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
leader	Pearson Correlation	-.025	.139*	.006	.049	-.072	.035	.120
	Sig. (2-tailed)	.717	.042	.926	.477	.293	.630	.096
	N	215	215	215	215	215	189	193
insp	Pearson Correlation	.014	.093	.024	.016	-.095	.011	.099
	Sig. (2-tailed)	.838	.176	.725	.812	.167	.880	.171
	N	215	215	215	215	215	189	193
support	Pearson Correlation	-.013	.091	-.002	.090	-.079	.027	.054
	Sig. (2-tailed)	.847	.185	.980	.188	.246	.711	.458
	N	215	215	215	215	215	189	193
standard	Pearson Correlation	-.067	.080	.000	.070	-.003	-.001	.038
	Sig. (2-tailed)	.330	.242	.997	.306	.964	.988	.599
	N	215	215	215	215	215	189	193
contextual	Pearson Correlation	.000	.101	.012	.059	-.095	.021	.082
	Sig. (2-tailed)	.999	.141	.861	.385	.163	.774	.257
	N	215	215	215	215	215	189	193
task	Pearson Correlation	-.050	.122	.003	.066	-.043	.019	.088
	Sig. (2-tailed)	.464	.073	.960	.338	.535	.796	.222
	N	215	215	215	215	215	189	193
total	Pearson Correlation	-.023	.117	.005	.063	-.073	.024	.089
	Sig. (2-tailed)	.735	.087	.943	.356	.289	.739	.216
	N	215	215	215	215	215	189	193
N1 Nervous and Stressed Out	Pearson Correlation	.748**	-.346**	-.277**	-.166**	-.447**	.921**	-.449**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
N2 Worrying	Pearson Correlation	.723**	-.345**	-.263**	-.156**	-.326**	.877**	-.509**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
N3 Irritable	Pearson Correlation	.693**	-.200**	-.223**	-.293**	-.314**	.819**	-.352**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
N4 Envious and Jealous	Pearson Correlation	.589**	-.173**	-.178**	-.264**	-.328**	.773**	-.335**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		nipitransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
E1 Shy and Bashful	Pearson Correlation	.395**	-.733**	-.290**	-.243**	-.218**	.505**	-.902**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
E2 Talkative	Pearson Correlation	-.179**	.736**	.236**	.384**	.118**	-.175**	.782**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.000
	N	793	794	795	794	793	690	702
E3 Socially Active	Pearson Correlation	-.215**	.727**	.189**	.356**	.206**	-.250**	.749**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
E4 Assertive	Pearson Correlation	-.119**	.219**	.377**	.116**	.124**	-.112**	.182**
	Sig. (2-tailed)	.001	.000	.000	.001	.000	.003	.000
	N	793	794	795	794	793	690	702
E5 Unsociable	Pearson Correlation	.382**	-.702**	-.196**	-.371**	-.262**	.460**	-.823**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
O1 Philosophical	Pearson Correlation	-.134**	.102**	.625**	.151**	.114**	-.090*	.105**
	Sig. (2-tailed)	.000	.004	.000	.000	.001	.018	.005
	N	793	794	795	794	793	690	702
O2 Scientific Interest	Pearson Correlation	-.088*	.128**	.520**	.097**	.103**	-.062	.124**
	Sig. (2-tailed)	.014	.000	.000	.006	.004	.103	.001
	N	793	794	795	794	793	690	702
O3 Creative	Pearson Correlation	-.251**	.365**	.531**	.270**	.296**	-.292**	.377**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
O4 Reflective	Pearson Correlation	.064	.019	.463**	.164**	.060	.106**	-.023
	Sig. (2-tailed)	.073	.599	.000	.000	.093	.005	.537
	N	793	794	795	794	793	690	702
O5 Cultured	Pearson Correlation	-.120**	.085*	.393**	.098**	.120**	-.096*	.092*
	Sig. (2-tailed)	.001	.017	.000	.005	.001	.012	.015
	N	793	794	795	794	793	690	702
A1 Friendly	Pearson Correlation	-.381**	.459**	.188**	.490**	.271**	-.360**	.479**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	792	793	793	793	792	690	702

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
A2 Considerate	Pearson Correlation	-.189**	.110**	.070*	.546**	.222**	-.175**	.148**
	Sig. (2-tailed)	.000	.002	.048	.000	.000	.000	.000
	N	792	793	793	793	792	690	702
A3 Cold and Insensitive	Pearson Correlation	-.285**	.277**	.116**	.542**	.227**	-.389**	.382**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.000
	N	791	792	793	792	791	690	702
A4 Helpful	Pearson Correlation	-.114**	.282**	.133**	.591**	.228**	-.168**	.299**
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
A5 Warm and Sympathetic	Pearson Correlation	-.204**	.290**	.160**	.602**	.272**	-.259**	.356**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	792	793	794	793	792	690	702
C1 Efficient and Dependable	Pearson Correlation	-.360**	.214**	.231**	.286**	.593**	-.426**	.330**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	792	793	794	793	792	690	702
C2 Hard Working	Pearson Correlation	-.275**	.274**	.197**	.311**	.643**	-.350**	.352**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
C3 Organized	Pearson Correlation	-.177**	.212**	.092**	.240**	.743**	-.233**	.264**
	Sig. (2-tailed)	.000	.000	.009	.000	.000	.000	.000
	N	793	794	795	794	793	690	702
Scores for N_IPIP	Pearson Correlation	1	-.316**	-.311**	-.257**	-.379**	.828**	-.417**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	793	793	793	793	793	677	688
Scores for E_IPIP	Pearson Correlation	-.316**	1	.334**	.393**	.202**	-.329**	.871**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	793	794	794	794	793	678	689
Scores for O_IPIP	Pearson Correlation	-.311**	.334**	1	.238**	.215**	-.267**	.318**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	793	794	795	794	793	678	689
Scores for A_IPIP	Pearson Correlation	-.257**	.393**	.238**	1	.325**	-.225**	.375**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	793	794	794	794	793	678	689

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		nipitransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Scores for C_IPIP	Pearson Correlation	-.379**	.202**	.215**	.325**	1	-.414**	.261**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	793	793	793	793	793	677	688
Scores for N_TSD	Pearson Correlation	.828**	-.329**	-.267**	-.225**	-.414**	1	-.485**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	677	678	678	678	677	690	629
Scores for E_TSD	Pearson Correlation	-.417**	.871**	.318**	.375**	.261**	-.485**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	688	689	689	689	688	629	702
Scores for O_TSD	Pearson Correlation	-.109**	.149**	.692**	.176**	.146**	-.083*	.139**
	Sig. (2-tailed)	.004	.000	.000	.000	.000	.036	.000
	N	707	708	708	708	707	644	654
Scores for A_TSD	Pearson Correlation	-.338**	.402**	.176**	.721**	.313**	-.390**	.450**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	690	691	691	691	690	638	641
Scores for C_TSD	Pearson Correlation	-.310**	.259**	.183**	.305**	.763**	-.394**	.350**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	696	697	697	697	696	625	649
vs_perc	Pearson Correlation	.075	.018	.009	-.010	.033	.061	-.019
	Sig. (2-tailed)	.055	.637	.813	.798	.403	.146	.646
	N	658	659	660	659	658	570	582
sa_perc	Pearson Correlation	-.006	-.025	.031	-.021	.026	-.007	-.012
	Sig. (2-tailed)	.868	.514	.421	.584	.508	.867	.781
	N	658	659	660	659	658	570	582
ps_perc	Pearson Correlation	.075	-.025	.059	-.047	-.003	.061	-.065
	Sig. (2-tailed)	.055	.530	.130	.232	.940	.145	.115
	N	658	659	660	659	658	570	582
tot_perc	Pearson Correlation	.064	-.018	.060	-.034	.020	.052	-.049
	Sig. (2-tailed)	.099	.638	.121	.386	.609	.215	.239
	N	658	659	660	659	658	570	582
gender	Pearson Correlation	-.047	-.004	.015	-.016	-.061	-.032	.024
	Sig. (2-tailed)	.199	.915	.679	.664	.098	.411	.529
	N	747	748	749	748	747	652	665

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Birth_Yr	Pearson Correlation	-.007	-.046	-.030	.018	.001	.046	-.094
	Sig. (2-tailed)	.916	.505	.661	.800	.984	.525	.197
	N	211	211	211	211	211	192	190
edulevel	Pearson Correlation	.104	-.047	.166	.059	.015	.118	-.065
	Sig. (2-tailed)	.308	.648	.101	.566	.881	.272	.554
	N	98	98	98	98	98	89	85
language	Pearson Correlation	.054	.066	-.073	.113	.048	.067	.072
	Sig. (2-tailed)	.594	.516	.469	.265	.638	.521	.505
	N	100	100	100	100	100	93	88

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
leader	Pearson Correlation	-.059	.019	-.205**	.122	.174	.265**	.258**	-.146*
	Sig. (2-tailed)	.413	.796	.004	.176	.053	.003	.004	.036
	N	195	192	195	124	124	124	124	207
insp	Pearson Correlation	-.005	.018	-.134	.034	.038	.185*	.146	-.031
	Sig. (2-tailed)	.948	.805	.061	.705	.673	.039	.105	.654
	N	195	192	195	124	124	124	124	207
support	Pearson Correlation	-.016	.044	-.175*	.143	.176	.212*	.211*	-.068
	Sig. (2-tailed)	.824	.548	.015	.114	.051	.018	.019	.330
	N	195	192	195	124	124	124	124	207
standard	Pearson Correlation	-.007	.083	-.091	.136	.144	.125	.150	-.097
	Sig. (2-tailed)	.923	.254	.203	.131	.110	.167	.096	.166
	N	195	192	195	124	124	124	124	207
contextual	Pearson Correlation	-.011	.034	-.169*	.102	.123	.225*	.203*	-.055
	Sig. (2-tailed)	.874	.642	.018	.260	.173	.012	.024	.430
	N	195	192	195	124	124	124	124	207
task	Pearson Correlation	-.037	.055	-.165*	.150	.186*	.230*	.239**	-.136
	Sig. (2-tailed)	.609	.449	.021	.096	.039	.010	.007	.051
	N	195	192	195	124	124	124	124	207
total	Pearson Correlation	-.029	.044	-.177*	.130	.169	.240**	.234**	-.100
	Sig. (2-tailed)	.686	.542	.013	.149	.061	.007	.009	.153
	N	195	192	195	124	124	124	124	207
N1 Nervous and Stressed Out	Pearson Correlation	-.076*	-.311**	-.407**	.043	.000	.046	.035	-.024
	Sig. (2-tailed)	.043	.000	.000	.260	.995	.228	.358	.506
	N	720	704	712	674	674	674	674	768
N2 Worrying	Pearson Correlation	-.038	-.265**	-.299**	.058	-.007	.072	.058	-.041
	Sig. (2-tailed)	.313	.000	.000	.130	.849	.063	.135	.261
	N	720	704	712	675	675	675	675	769
N3 Irritable	Pearson Correlation	-.093*	-.426**	-.287**	.078*	.010	.089*	.080*	-.032
	Sig. (2-tailed)	.012	.000	.000	.042	.804	.021	.037	.380
	N	720	704	712	675	675	675	675	769
N4 Envious and Jealous	Pearson Correlation	-.098**	-.411**	-.341**	.108**	-.026	.094*	.079*	-.016
	Sig. (2-tailed)	.008	.000	.000	.005	.504	.014	.040	.662
	N	720	704	712	675	675	675	675	769

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
E1 Shy and Bashful	Pearson Correlation	-.114**	-.294**	-.256**	-.005	.006	.024	.012	-.020
	Sig. (2-tailed)	.002	.000	.000	.907	.875	.530	.748	.579
	N	720	704	712	675	675	675	675	769
E2 Talkative	Pearson Correlation	.159**	.455**	.243**	.000	-.023	-.045	-.033	-.036
	Sig. (2-tailed)	.000	.000	.000	.997	.544	.244	.389	.315
	N	720	704	712	675	675	675	675	769
E3 Socially Active	Pearson Correlation	.093*	.419**	.313**	.050	.000	-.042	-.005	.033
	Sig. (2-tailed)	.013	.000	.000	.194	.996	.274	.892	.367
	N	720	704	712	675	675	675	675	769
E4 Assertive	Pearson Correlation	.484**	.042	.141**	-.028	.003	.001	-.018	-.033
	Sig. (2-tailed)	.000	.261	.000	.462	.941	.969	.647	.358
	N	720	704	712	675	675	675	675	769
E5 Unsociable	Pearson Correlation	-.014	-.495**	-.352**	-.028	.019	.051	.027	-.028
	Sig. (2-tailed)	.712	.000	.000	.473	.623	.187	.487	.444
	N	720	704	712	675	675	675	675	769
O1 Philosophical	Pearson Correlation	.902**	.131**	.121**	-.014	-.011	.059	.032	-.013
	Sig. (2-tailed)	.000	.000	.001	.712	.778	.128	.412	.723
	N	720	704	712	675	675	675	675	769
O2 Scientific Interest	Pearson Correlation	.831**	.067	.117**	-.014	-.040	.024	.006	.031
	Sig. (2-tailed)	.000	.075	.002	.717	.299	.530	.879	.398
	N	720	704	712	675	675	675	675	769
O3 Creative	Pearson Correlation	.535**	.341**	.418**	.042	.072	.012	.057	-.022
	Sig. (2-tailed)	.000	.000	.000	.272	.063	.761	.140	.549
	N	720	704	712	675	675	675	675	769
O4 Reflective	Pearson Correlation	.754**	.090*	.122**	.031	.038	.062	.066	-.011
	Sig. (2-tailed)	.000	.017	.001	.420	.327	.108	.086	.756
	N	720	704	712	675	675	675	675	769
O5 Cultured	Pearson Correlation	.629**	.061	.109**	.001	-.031	.040	.024	.057
	Sig. (2-tailed)	.000	.108	.003	.982	.414	.294	.541	.116
	N	720	704	712	674	674	674	674	768
A1 Friendly	Pearson Correlation	.094*	.755**	.382**	-.013	-.008	-.062	-.042	.002
	Sig. (2-tailed)	.012	.000	.000	.743	.832	.106	.275	.960
	N	720	704	712	672	672	672	672	766

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
A2 Considerate	Pearson Correlation	.148**	.755**	.295**	-.060	-.019	-.086*	-.079*	.029
	Sig. (2-tailed)	.000	.000	.000	.117	.619	.026	.042	.418
	N	720	704	712	672	672	672	672	766
A3 Cold and Insensitive	Pearson Correlation	.037	.766**	.283**	.007	.004	-.062	-.027	-.045
	Sig. (2-tailed)	.326	.000	.000	.852	.913	.106	.484	.213
	N	720	704	712	673	673	673	673	767
A4 Helpful	Pearson Correlation	.136**	.713**	.354**	.019	.049	.009	.035	.023
	Sig. (2-tailed)	.000	.000	.000	.621	.208	.814	.365	.528
	N	720	704	712	675	675	675	675	769
A5 Warm and Sympathetic	Pearson Correlation	.170**	.879**	.484**	-.010	.024	-.029	-.010	-.037
	Sig. (2-tailed)	.000	.000	.000	.804	.538	.455	.793	.308
	N	720	704	712	674	674	674	674	768
C1 Efficient and Dependable	Pearson Correlation	.168**	.473**	.881**	.034	.053	-.007	.030	-.059
	Sig. (2-tailed)	.000	.000	.000	.383	.169	.851	.437	.102
	N	720	704	712	674	674	674	674	768
C2 Hard Working	Pearson Correlation	.211**	.424**	.803**	.014	.015	-.051	-.018	-.087*
	Sig. (2-tailed)	.000	.000	.000	.720	.691	.184	.648	.016
	N	720	704	712	675	675	675	675	769
C3 Organized	Pearson Correlation	.129**	.332**	.894**	.065	.045	-.001	.040	-.050
	Sig. (2-tailed)	.001	.000	.000	.090	.248	.974	.301	.168
	N	720	704	712	675	675	675	675	769
Scores for N_IPIP	Pearson Correlation	-.109**	-.338**	-.310**	.075	-.006	.075	.064	-.047
	Sig. (2-tailed)	.004	.000	.000	.055	.868	.055	.099	.199
	N	707	690	696	658	658	658	658	747
Scores for E_IPIP	Pearson Correlation	.149**	.402**	.259**	.018	-.025	-.025	-.018	-.004
	Sig. (2-tailed)	.000	.000	.000	.637	.514	.530	.638	.915
	N	708	691	697	659	659	659	659	748
Scores for O_IPIP	Pearson Correlation	.692**	.176**	.183**	.009	.031	.059	.060	.015
	Sig. (2-tailed)	.000	.000	.000	.813	.421	.130	.121	.679
	N	708	691	697	660	660	660	660	749
Scores for A_IPIP	Pearson Correlation	.176**	.721**	.305**	-.010	-.021	-.047	-.034	-.016
	Sig. (2-tailed)	.000	.000	.000	.798	.584	.232	.386	.664
	N	708	691	697	659	659	659	659	748

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Scores for C_IPIP	Pearson Correlation	.146**	.313**	.763**	.033	.026	-.003	.020	-.061
	Sig. (2-tailed)	.000	.000	.000	.403	.508	.940	.609	.098
	N	707	690	696	658	658	658	658	747
Scores for N_TSD	Pearson Correlation	-.083*	-.390**	-.394**	.061	-.007	.061	.052	-.032
	Sig. (2-tailed)	.036	.000	.000	.146	.867	.145	.215	.411
	N	644	638	625	570	570	570	570	652
Scores for E_TSD	Pearson Correlation	.139**	.450**	.350**	-.019	-.012	-.065	-.049	.024
	Sig. (2-tailed)	.000	.000	.000	.646	.781	.115	.239	.529
	N	654	641	649	582	582	582	582	665
Scores for O_TSD	Pearson Correlation	1	.153**	.191**	-.010	-.003	.059	.041	.030
	Sig. (2-tailed)		.000	.000	.817	.936	.152	.319	.439
	N	720	656	656	594	594	594	594	680
Scores for A_TSD	Pearson Correlation	.153**	1	.479**	-.015	.023	-.049	-.022	-.022
	Sig. (2-tailed)	.000		.000	.710	.577	.241	.591	.577
	N	656	704	643	582	582	582	582	667
Scores for C_TSD	Pearson Correlation	.191**	.479**	1	.035	.051	-.020	.019	-.068
	Sig. (2-tailed)	.000	.000		.397	.217	.630	.647	.077
	N	656	643	712	586	586	586	586	671
vs_perc	Pearson Correlation	-.010	-.015	.035	1	.267**	.367**	.651**	.010
	Sig. (2-tailed)	.817	.710	.397		.000	.000	.000	.804
	N	594	582	586	675	675	675	675	675
sa_perc	Pearson Correlation	-.003	.023	.051	.267**	1	.436**	.679**	-.128**
	Sig. (2-tailed)	.936	.577	.217	.000		.000	.000	.001
	N	594	582	586	675	675	675	675	675
ps_perc	Pearson Correlation	.059	-.049	-.020	.367**	.436**	1	.877**	-.135**
	Sig. (2-tailed)	.152	.241	.630	.000	.000		.000	.000
	N	594	582	586	675	675	675	675	675
tot_perc	Pearson Correlation	.041	-.022	.019	.651**	.679**	.877**	1	-.120**
	Sig. (2-tailed)	.319	.591	.647	.000	.000	.000		.002
	N	594	582	586	675	675	675	675	675
gender	Pearson Correlation	.030	-.022	-.068	.010	-.128**	-.135**	-.120**	1
	Sig. (2-tailed)	.439	.577	.077	.804	.001	.000	.002	
	N	680	667	671	675	675	675	675	769

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Birth_Yr	Pearson Correlation	-.065	.012	.088	-.027	.231**	.018	.105	-.085
	Sig. (2-tailed)	.369	.874	.220	.762	.010	.839	.245	.209
	N	196	189	196	125	125	125	125	219
edulevel	Pearson Correlation	.108	-.039	.013	.187	.139	.213*	.226*	.014
	Sig. (2-tailed)	.321	.723	.905	.081	.197	.047	.034	.894
	N	86	85	91	88	88	88	88	98
language	Pearson Correlation	.048	.062	-.022	.092	-.112	.009	.042	.095
	Sig. (2-tailed)	.652	.566	.835	.419	.321	.935	.713	.341
	N	92	87	93	80	80	80	80	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Birth_Yr	edulevel	language
leader	Pearson Correlation	-.180*	.292*	.288*
	Sig. (2-tailed)	.030	.029	.027
	N	146	56	59
insp	Pearson Correlation	-.211*	.276*	.121
	Sig. (2-tailed)	.011	.039	.362
	N	146	56	59
support	Pearson Correlation	-.098	.350**	.166
	Sig. (2-tailed)	.239	.008	.209
	N	146	56	59
standard	Pearson Correlation	-.162	.452**	-.111
	Sig. (2-tailed)	.051	.000	.401
	N	146	56	59
contextual	Pearson Correlation	-.168*	.366**	.162
	Sig. (2-tailed)	.042	.006	.221
	N	146	56	59
task	Pearson Correlation	-.188*	.447**	.108
	Sig. (2-tailed)	.023	.001	.415
	N	146	56	59
total	Pearson Correlation	-.191*	.432**	.138
	Sig. (2-tailed)	.021	.001	.297
	N	146	56	59
N1 Nervous and Stressed Out	Pearson Correlation	.020	.104	.100
	Sig. (2-tailed)	.769	.305	.314
	N	219	99	103
N2 Worrying	Pearson Correlation	.026	.121	.080
	Sig. (2-tailed)	.703	.232	.420
	N	219	99	103
N3 Irritable	Pearson Correlation	.026	.175	.098
	Sig. (2-tailed)	.697	.082	.324
	N	219	99	103
N4 Envious and Jealous	Pearson Correlation	.103	-.092	-.052
	Sig. (2-tailed)	.129	.366	.602
	N	219	99	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Birth_Yr	edulevel	language
E1 Shy and Bashful	Pearson Correlation	.169*	.060	-.097
	Sig. (2-tailed)	.012	.553	.329
	N	219	99	103
E2 Talkative	Pearson Correlation	.012	-.145	.063
	Sig. (2-tailed)	.856	.153	.524
	N	219	99	103
E3 Socially Active	Pearson Correlation	.061	-.130	.022
	Sig. (2-tailed)	.372	.199	.823
	N	219	99	103
E4 Assertive	Pearson Correlation	-.078	.167	-.133
	Sig. (2-tailed)	.251	.099	.180
	N	219	99	103
E5 Unsociable	Pearson Correlation	.015	.049	.058
	Sig. (2-tailed)	.829	.628	.558
	N	219	99	103
O1 Philosophical	Pearson Correlation	-.102	.155	.064
	Sig. (2-tailed)	.132	.125	.523
	N	219	99	103
O2 Scientific Interest	Pearson Correlation	-.075	.071	.105
	Sig. (2-tailed)	.270	.487	.290
	N	219	99	103
O3 Creative	Pearson Correlation	.098	.143	-.001
	Sig. (2-tailed)	.149	.159	.988
	N	219	99	103
O4 Reflective	Pearson Correlation	.038	.020	-.025
	Sig. (2-tailed)	.573	.842	.799
	N	219	99	103
O5 Cultured	Pearson Correlation	-.177**	.163	.000
	Sig. (2-tailed)	.009	.108	.998
	N	219	99	103
A1 Friendly	Pearson Correlation	.054	-.192	-.010
	Sig. (2-tailed)	.425	.057	.921
	N	219	99	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Birth_Yr	edulevel	language
A2 Considerate	Pearson Correlation	-.023	-.016	.035
	Sig. (2-tailed)	.735	.872	.726
	N	219	99	103
A3 Cold and Insensitive	Pearson Correlation	.022	.036	.143
	Sig. (2-tailed)	.741	.725	.148
	N	219	99	103
A4 Helpful	Pearson Correlation	.089	-.042	-.040
	Sig. (2-tailed)	.188	.681	.686
	N	219	99	103
A5 Warm and Sympathetic	Pearson Correlation	.037	-.003	.010
	Sig. (2-tailed)	.584	.976	.920
	N	219	99	103
C1 Efficient and Dependable	Pearson Correlation	.036	-.011	-.124
	Sig. (2-tailed)	.592	.916	.213
	N	219	99	103
C2 Hard Working	Pearson Correlation	.042	.051	.023
	Sig. (2-tailed)	.532	.614	.819
	N	219	99	103
C3 Organized	Pearson Correlation	.082	.009	.005
	Sig. (2-tailed)	.225	.926	.960
	N	219	99	103
Scores for N_IPIP	Pearson Correlation	-.007	.104	.054
	Sig. (2-tailed)	.916	.308	.594
	N	211	98	100
Scores for E_IPIP	Pearson Correlation	-.046	-.047	.066
	Sig. (2-tailed)	.505	.648	.516
	N	211	98	100
Scores for O_IPIP	Pearson Correlation	-.030	.166	-.073
	Sig. (2-tailed)	.661	.101	.469
	N	211	98	100
Scores for A_IPIP	Pearson Correlation	.018	.059	.113
	Sig. (2-tailed)	.800	.566	.265
	N	211	98	100

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Birth_Yr	edulevel	language
Scores for C_IPIP	Pearson Correlation	.001	.015	.048
	Sig. (2-tailed)	.984	.881	.638
	N	211	98	100
Scores for N_TSD	Pearson Correlation	.046	.118	.067
	Sig. (2-tailed)	.525	.272	.521
	N	192	89	93
Scores for E_TSD	Pearson Correlation	-.094	-.065	.072
	Sig. (2-tailed)	.197	.554	.505
	N	190	85	88
Scores for O_TSD	Pearson Correlation	-.065	.108	.048
	Sig. (2-tailed)	.369	.321	.652
	N	196	86	92
Scores for A_TSD	Pearson Correlation	.012	-.039	.062
	Sig. (2-tailed)	.874	.723	.566
	N	189	85	87
Scores for C_TSD	Pearson Correlation	.088	.013	-.022
	Sig. (2-tailed)	.220	.905	.835
	N	196	91	93
vs_perc	Pearson Correlation	-.027	.187	.092
	Sig. (2-tailed)	.762	.081	.419
	N	125	88	80
sa_perc	Pearson Correlation	.231**	.139	-.112
	Sig. (2-tailed)	.010	.197	.321
	N	125	88	80
ps_perc	Pearson Correlation	.018	.213*	.009
	Sig. (2-tailed)	.839	.047	.935
	N	125	88	80
tot_perc	Pearson Correlation	.105	.226*	.042
	Sig. (2-tailed)	.245	.034	.713
	N	125	88	80
gender	Pearson Correlation	-.085	.014	.095
	Sig. (2-tailed)	.209	.894	.341
	N	219	98	103

Predictor and Criterion Measures - Full Correlation Matrix

Correlations

		Birth_Yr	edulevel	language
Birth_Yr	Pearson Correlation	1	.360**	-.022
	Sig. (2-tailed)		.001	.827
	N	219	79	103
edulevel	Pearson Correlation	.360**	1	.103
	Sig. (2-tailed)	.001		.378
	N	79	99	76
language	Pearson Correlation	-.022	.103	1
	Sig. (2-tailed)	.827	.378	
	N	103	76	103

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Predictor and Criterion Variables - Officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
leader	Pearson Correlation	1	.587**	.486**	.337**	.612**	.826**	.776**	.074
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.444
	N	110	110	110	110	110	110	110	110
insp	Pearson Correlation	.587**	1	.528**	.478**	.869**	.652**	.813**	.047
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.626
	N	110	110	110	110	110	110	110	110
support	Pearson Correlation	.486**	.528**	1	.519**	.879**	.614**	.806**	.199*
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.037
	N	110	110	110	110	110	110	110	110
standard	Pearson Correlation	.337**	.478**	.519**	1	.571**	.809**	.744**	.063
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.510
	N	110	110	110	110	110	110	110	110
contextual	Pearson Correlation	.612**	.869**	.879**	.571**	1	.724**	.926**	.142
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.138
	N	110	110	110	110	110	110	110	110
task	Pearson Correlation	.826**	.652**	.614**	.809**	.724**	1	.930**	.084
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.383
	N	110	110	110	110	110	110	110	110
total	Pearson Correlation	.776**	.813**	.806**	.744**	.926**	.930**	1	.125
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.193
	N	110	110	110	110	110	110	110	110
N1 Nervous and Stressed Out	Pearson Correlation	.074	.047	.199*	.063	.142	.084	.125	1
	Sig. (2-tailed)	.444	.626	.037	.510	.138	.383	.193	
	N	110	110	110	110	110	110	110	200
N2 Worrying	Pearson Correlation	.073	-.007	.170	.015	.095	.055	.086	.716**
	Sig. (2-tailed)	.447	.940	.076	.875	.322	.570	.374	.000
	N	110	110	110	110	110	110	110	200
N3 Irritable	Pearson Correlation	.025	-.025	.068	-.057	.025	-.019	.007	.568**
	Sig. (2-tailed)	.796	.793	.481	.554	.792	.847	.940	.000
	N	110	110	110	110	110	110	110	200
N4 Envious and Jealous	Pearson Correlation	-.095	-.158	-.078	-.212*	-.134	-.186	-.172	.546**
	Sig. (2-tailed)	.325	.099	.418	.026	.162	.051	.072	.000
	N	110	110	110	110	110	110	110	200

Predictor and Criterion Variables - Officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
E1 Shy and Bashful	Pearson Correlation	-.139	-.034	.013	-.020	-.012	-.099	-.060	.500**
	Sig. (2-tailed)	.147	.722	.896	.836	.902	.304	.533	.000
	N	110	110	110	110	110	110	110	200
E2 Talkative	Pearson Correlation	.101	.127	.034	.033	.091	.083	.093	-.072
	Sig. (2-tailed)	.294	.187	.724	.734	.344	.391	.334	.312
	N	110	110	110	110	110	110	110	200
E3 Socially Active	Pearson Correlation	-.058	-.084	-.015	-.139	-.056	-.120	-.093	-.197**
	Sig. (2-tailed)	.544	.385	.873	.147	.562	.212	.332	.005
	N	110	110	110	110	110	110	110	200
E4 Assertive	Pearson Correlation	-.136	-.098	-.080	-.033	-.102	-.105	-.120	-.056
	Sig. (2-tailed)	.156	.309	.404	.734	.290	.277	.211	.430
	N	110	110	110	110	110	110	110	200
e5recode	Pearson Correlation	.030	.000	.082	.028	.048	.036	.052	.403**
	Sig. (2-tailed)	.753	.997	.393	.770	.620	.711	.592	.000
	N	110	110	110	110	110	110	110	200
O1 Philosophical	Pearson Correlation	-.153	-.100	.001	-.051	-.055	-.126	-.097	-.096
	Sig. (2-tailed)	.111	.300	.993	.595	.565	.190	.315	.178
	N	110	110	110	110	110	110	110	200
O2 Scientific Interest	Pearson Correlation	-.018	-.145	-.044	-.177	-.107	-.118	-.118	-.118
	Sig. (2-tailed)	.849	.132	.650	.064	.268	.221	.221	.097
	N	110	110	110	110	110	110	110	200
O3 Creative	Pearson Correlation	.054	.106	.119	.084	.129	.084	.116	-.247**
	Sig. (2-tailed)	.577	.272	.216	.385	.181	.385	.228	.000
	N	110	110	110	110	110	110	110	200
O4 Reflective	Pearson Correlation	-.233*	-.126	-.045	-.164	-.097	-.244*	-.183	.097
	Sig. (2-tailed)	.014	.189	.642	.087	.314	.010	.055	.171
	N	110	110	110	110	110	110	110	200
O5 Cultured	Pearson Correlation	-.040	-.087	.027	-.004	-.033	-.027	-.032	-.071
	Sig. (2-tailed)	.676	.364	.777	.969	.732	.776	.743	.320
	N	110	110	110	110	110	110	110	200
A1 Friendly	Pearson Correlation	.046	.142	.019	.096	.091	.087	.096	-.170*
	Sig. (2-tailed)	.631	.138	.845	.316	.346	.368	.317	.016
	N	110	110	110	110	110	110	110	200

Predictor and Criterion Variables - Officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
A2 Considerate	Pearson Correlation	.037	-.014	.101	.121	.051	.095	.081	.010
	Sig. (2-tailed)	.704	.888	.295	.207	.596	.322	.399	.892
	N	110	110	110	110	110	110	110	200
A3 Cold and Insensitive	Pearson Correlation	-.027	.048	.050	.176	.056	.089	.078	-.080
	Sig. (2-tailed)	.782	.620	.609	.066	.566	.358	.420	.263
	N	109	109	109	109	109	109	109	199
A4 Helpful	Pearson Correlation	-.056	.035	.051	.091	.049	.019	.036	-.129
	Sig. (2-tailed)	.559	.717	.600	.347	.611	.843	.705	.069
	N	110	110	110	110	110	110	110	200
A5 Warm and Sympathetic	Pearson Correlation	-.045	-.008	.029	.044	.012	-.002	.010	-.010
	Sig. (2-tailed)	.640	.932	.767	.646	.900	.987	.922	.889
	N	110	110	110	110	110	110	110	200
C1 Efficient and Dependable	Pearson Correlation	-.138	-.021	-.084	-.041	-.061	-.110	-.092	-.390**
	Sig. (2-tailed)	.151	.826	.383	.674	.527	.251	.341	.000
	N	110	110	110	110	110	110	110	200
C2 Hard Working	Pearson Correlation	-.149	-.104	-.083	-.005	-.106	-.096	-.112	-.392**
	Sig. (2-tailed)	.121	.280	.391	.958	.268	.319	.245	.000
	N	110	110	110	110	110	110	110	200
C3 Organized	Pearson Correlation	-.056	-.027	-.102	-.003	-.075	-.037	-.059	-.304**
	Sig. (2-tailed)	.560	.778	.288	.976	.437	.703	.541	.000
	N	110	110	110	110	110	110	110	200
Scores for N_IPIP	Pearson Correlation	.122	.081	.153	.017	.135	.086	.122	.685**
	Sig. (2-tailed)	.205	.402	.111	.863	.163	.373	.207	.000
	N	109	109	109	109	109	109	109	198
Scores for E_IPIP	Pearson Correlation	.145	.071	-.010	.020	.034	.102	.074	-.303**
	Sig. (2-tailed)	.134	.461	.917	.834	.724	.291	.445	.000
	N	109	109	109	109	109	109	109	198
Scores for O_IPIP	Pearson Correlation	-.064	-.038	.011	-.115	-.015	-.109	-.070	-.263**
	Sig. (2-tailed)	.509	.694	.912	.234	.875	.260	.468	.000
	N	109	109	109	109	109	109	109	198
Scores for A_IPIP	Pearson Correlation	-.005	.008	.072	.075	.047	.042	.044	-.053
	Sig. (2-tailed)	.958	.933	.455	.438	.630	.665	.646	.461
	N	109	109	109	109	109	109	109	198

Predictor and Criterion Variables - Officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Scores for C_IPIP	Pearson Correlation	-.058	-.023	-.126	.025	-.086	-.021	-.059	-.410**
	Sig. (2-tailed)	.551	.810	.193	.795	.373	.830	.543	.000
	N	109	109	109	109	109	109	109	198
Scores for N_TSD	Pearson Correlation	.012	-.015	.090	-.040	.044	-.018	.014	.892**
	Sig. (2-tailed)	.911	.888	.390	.700	.677	.866	.893	.000
	N	94	94	94	94	94	94	94	165
Scores for E_TSD	Pearson Correlation	.132	.034	-.016	-.041	.009	.056	.035	-.484**
	Sig. (2-tailed)	.205	.745	.877	.693	.932	.591	.736	.000
	N	94	94	94	94	94	94	94	167
Scores for O_TSD	Pearson Correlation	-.129	-.079	.052	-.052	-.014	-.112	-.069	-.082
	Sig. (2-tailed)	.218	.453	.620	.619	.892	.286	.509	.285
	N	93	93	93	93	93	93	93	171
Scores for A_TSD	Pearson Correlation	.030	.044	.057	.127	.057	.094	.082	-.123
	Sig. (2-tailed)	.774	.669	.577	.216	.577	.358	.425	.115
	N	97	97	97	97	97	97	97	167
Scores for C_TSD	Pearson Correlation	-.126	-.040	-.165	-.021	-.118	-.090	-.112	-.428**
	Sig. (2-tailed)	.225	.697	.109	.843	.254	.385	.281	.000
	N	95	95	95	95	95	95	95	167
vs_perc	Pearson Correlation	-.066	-.093	.049	.014	-.024	-.033	-.038	.004
	Sig. (2-tailed)	.510	.351	.625	.892	.811	.743	.704	.953
	N	102	102	102	102	102	102	102	180
sa_perc	Pearson Correlation	.204*	-.004	.243*	.149	.140	.217*	.194	.094
	Sig. (2-tailed)	.040	.969	.014	.134	.161	.029	.050	.210
	N	102	102	102	102	102	102	102	180
ps_perc	Pearson Correlation	.202*	.123	.185	.069	.178	.167	.182	.045
	Sig. (2-tailed)	.042	.217	.063	.493	.074	.094	.066	.548
	N	102	102	102	102	102	102	102	180
tot_perc	Pearson Correlation	.182	.068	.183	.083	.145	.163	.162	.037
	Sig. (2-tailed)	.067	.499	.066	.410	.145	.101	.104	.617
	N	102	102	102	102	102	102	102	180
gender	Pearson Correlation	-.250**	-.205*	-.010	-.074	-.122	-.202*	-.167	-.005
	Sig. (2-tailed)	.010	.035	.919	.452	.213	.038	.087	.944
	N	106	106	106	106	106	106	106	185

Predictor and Criterion Variables - Officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Birth_Yr	Pearson Correlation	.269	.223	.178	.156	.222	.263	.263	.183
	Sig. (2-tailed)	.071	.136	.236	.302	.138	.078	.078	.134
	N	46	46	46	46	46	46	46	68
edulevel	Pearson Correlation	.077	.102	.274	.336*	.234	.264	.266	.055
	Sig. (2-tailed)	.619	.509	.072	.026	.126	.083	.082	.656
	N	44	44	44	44	44	44	44	69
language	Pearson Correlation	.234	.240	.291	-.235	.301	.010	.167	.020
	Sig. (2-tailed)	.176	.165	.089	.174	.079	.952	.338	.886
	N	35	35	35	35	35	35	35	53

Predictor and Criterion Variables - Officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
leader	Pearson Correlation	.073	.025	-.095	-.139	.101	-.058	-.136
	Sig. (2-tailed)	.447	.796	.325	.147	.294	.544	.156
	N	110	110	110	110	110	110	110
insp	Pearson Correlation	-.007	-.025	-.158	-.034	.127	-.084	-.098
	Sig. (2-tailed)	.940	.793	.099	.722	.187	.385	.309
	N	110	110	110	110	110	110	110
support	Pearson Correlation	.170	.068	-.078	.013	.034	-.015	-.080
	Sig. (2-tailed)	.076	.481	.418	.896	.724	.873	.404
	N	110	110	110	110	110	110	110
standard	Pearson Correlation	.015	-.057	-.212*	-.020	.033	-.139	-.033
	Sig. (2-tailed)	.875	.554	.026	.836	.734	.147	.734
	N	110	110	110	110	110	110	110
contextual	Pearson Correlation	.095	.025	-.134	-.012	.091	-.056	-.102
	Sig. (2-tailed)	.322	.792	.162	.902	.344	.562	.290
	N	110	110	110	110	110	110	110
task	Pearson Correlation	.055	-.019	-.186	-.099	.083	-.120	-.105
	Sig. (2-tailed)	.570	.847	.051	.304	.391	.212	.277
	N	110	110	110	110	110	110	110
total	Pearson Correlation	.086	.007	-.172	-.060	.093	-.093	-.120
	Sig. (2-tailed)	.374	.940	.072	.533	.334	.332	.211
	N	110	110	110	110	110	110	110
N1 Nervous and Stressed Out	Pearson Correlation	.716**	.568**	.546**	.500**	-.072	-.197**	-.056
	Sig. (2-tailed)	.000	.000	.000	.000	.312	.005	.430
	N	200	200	200	200	200	200	200
N2 Worrying	Pearson Correlation	1	.525**	.560**	.563**	-.014	-.141*	.006
	Sig. (2-tailed)		.000	.000	.000	.843	.047	.935
	N	200	200	200	200	200	200	200
N3 Irritable	Pearson Correlation	.525**	1	.624**	.484**	-.192**	-.179*	.072
	Sig. (2-tailed)	.000		.000	.000	.007	.011	.314
	N	200	200	200	200	200	200	200
N4 Envious and Jealous	Pearson Correlation	.560**	.624**	1	.447**	-.115	-.092	.055
	Sig. (2-tailed)	.000	.000		.000	.105	.196	.435
	N	200	200	200	200	200	200	200

Predictor and Criterion Variables - Officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
E1 Shy and Bashful	Pearson Correlation	.563**	.484**	.447**	1	-.401**	-.391**	.116
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.102
	N	200	200	200	200	200	200	200
E2 Talkative	Pearson Correlation	-.014	-.192**	-.115	-.401**	1	.572**	.147*
	Sig. (2-tailed)	.843	.007	.105	.000		.000	.038
	N	200	200	200	200	200	200	200
E3 Socially Active	Pearson Correlation	-.141*	-.179*	-.092	-.391**	.572**	1	.153*
	Sig. (2-tailed)	.047	.011	.196	.000	.000		.031
	N	200	200	200	200	200	200	200
E4 Assertive	Pearson Correlation	.006	.072	.055	.116	.147*	.153*	1
	Sig. (2-tailed)	.935	.314	.435	.102	.038	.031	
	N	200	200	200	200	200	200	200
e5recode	Pearson Correlation	.382**	.467**	.387**	.551**	-.424**	-.580**	.074
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.296
	N	200	200	200	200	200	200	200
O1 Philosophical	Pearson Correlation	-.109	-.169*	-.193**	-.136	.188**	.107	.471**
	Sig. (2-tailed)	.126	.016	.006	.056	.008	.131	.000
	N	200	200	200	200	200	200	200
O2 Scientific Interest	Pearson Correlation	-.044	-.195**	-.126	-.139*	.135	.145*	.309**
	Sig. (2-tailed)	.535	.006	.075	.050	.056	.040	.000
	N	200	200	200	200	200	200	200
O3 Creative	Pearson Correlation	-.135	-.216**	-.202**	-.268**	.215**	.375**	.192**
	Sig. (2-tailed)	.057	.002	.004	.000	.002	.000	.007
	N	200	200	200	200	200	200	200
O4 Reflective	Pearson Correlation	.088	.031	.045	.072	.103	.141*	.406**
	Sig. (2-tailed)	.215	.662	.523	.312	.148	.047	.000
	N	200	200	200	200	200	200	200
O5 Cultured	Pearson Correlation	-.072	-.173*	-.159*	-.014	-.080	-.031	.193**
	Sig. (2-tailed)	.312	.014	.025	.839	.260	.667	.006
	N	200	200	200	200	200	200	200
A1 Friendly	Pearson Correlation	-.114	-.399**	-.269**	-.249**	.455**	.511**	.040
	Sig. (2-tailed)	.108	.000	.000	.000	.000	.000	.576
	N	200	200	200	200	200	200	200

Predictor and Criterion Variables - Officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
A2 Considerate	Pearson Correlation	.076	-.288**	-.208**	-.013	.287**	.249**	.059
	Sig. (2-tailed)	.284	.000	.003	.856	.000	.000	.406
	N	200	200	200	200	200	200	200
A3 Cold and Insensitive	Pearson Correlation	-.141*	-.489**	-.343**	-.304**	.374**	.224**	-.108
	Sig. (2-tailed)	.047	.000	.000	.000	.000	.001	.128
	N	199	199	199	199	199	199	199
A4 Helpful	Pearson Correlation	.005	-.228**	-.179*	-.060	.359**	.460**	.083
	Sig. (2-tailed)	.940	.001	.011	.400	.000	.000	.240
	N	200	200	200	200	200	200	200
A5 Warm and Sympathetic	Pearson Correlation	.003	-.307**	-.266**	-.126	.454**	.419**	-.007
	Sig. (2-tailed)	.969	.000	.000	.076	.000	.000	.917
	N	200	200	200	200	200	200	200
C1 Efficient and Dependable	Pearson Correlation	-.304**	-.385**	-.414**	-.204**	.147*	.214**	-.035
	Sig. (2-tailed)	.000	.000	.000	.004	.038	.002	.619
	N	200	200	200	200	200	200	200
C2 Hard Working	Pearson Correlation	-.230**	-.288**	-.279**	-.175*	.199**	.329**	.155*
	Sig. (2-tailed)	.001	.000	.000	.013	.005	.000	.028
	N	200	200	200	200	200	200	200
C3 Organized	Pearson Correlation	-.195**	-.241**	-.243**	-.208**	.179*	.293**	.024
	Sig. (2-tailed)	.006	.001	.001	.003	.011	.000	.738
	N	200	200	200	200	200	200	200
Scores for N_IPIP	Pearson Correlation	.689**	.656**	.517**	.447**	-.142*	-.249**	-.124
	Sig. (2-tailed)	.000	.000	.000	.000	.046	.000	.082
	N	198	198	198	198	198	198	198
Scores for E_IPIP	Pearson Correlation	-.222**	-.315**	-.202**	-.633**	.709**	.729**	.147*
	Sig. (2-tailed)	.002	.000	.004	.000	.000	.000	.039
	N	198	198	198	198	198	198	198
Scores for O_IPIP	Pearson Correlation	-.254**	-.327**	-.238**	-.317**	.183**	.195**	.260**
	Sig. (2-tailed)	.000	.000	.001	.000	.010	.006	.000
	N	198	198	198	198	198	198	198
Scores for A_IPIP	Pearson Correlation	-.005	-.318**	-.239**	-.181*	.462**	.453**	.153*
	Sig. (2-tailed)	.942	.000	.001	.011	.000	.000	.032
	N	198	198	198	198	198	198	198

Predictor and Criterion Variables - Officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Scores for C_IPIP	Pearson Correlation	-.290**	-.390**	-.355**	-.267**	.167*	.246**	.072
	Sig. (2-tailed)	.000	.000	.000	.000	.019	.000	.316
	N	198	198	198	198	198	198	198
Scores for N_TSD	Pearson Correlation	.843**	.800**	.753**	.592**	-.104	-.161*	-.034
	Sig. (2-tailed)	.000	.000	.000	.000	.183	.039	.668
	N	165	165	165	165	165	165	165
Scores for E_TSD	Pearson Correlation	-.489**	-.520**	-.433**	-.873**	.722**	.735**	.066
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.400
	N	167	167	167	167	167	167	167
Scores for O_TSD	Pearson Correlation	-.063	-.202**	-.191*	-.153*	.190*	.139	.501**
	Sig. (2-tailed)	.412	.008	.012	.046	.013	.071	.000
	N	171	171	171	171	171	171	171
Scores for A_TSD	Pearson Correlation	-.066	-.507**	-.348**	-.264**	.528**	.483**	.035
	Sig. (2-tailed)	.395	.000	.000	.001	.000	.000	.657
	N	167	167	167	167	167	167	167
Scores for C_TSD	Pearson Correlation	-.267**	-.404**	-.414**	-.248**	.208**	.255**	.028
	Sig. (2-tailed)	.000	.000	.000	.001	.007	.001	.718
	N	167	167	167	167	167	167	167
vs_perc	Pearson Correlation	.098	.030	.076	.076	.042	.000	.072
	Sig. (2-tailed)	.189	.688	.312	.312	.575	1.000	.340
	N	180	180	180	180	180	180	180
sa_perc	Pearson Correlation	.067	.050	-.018	.050	.006	.018	.042
	Sig. (2-tailed)	.371	.507	.815	.506	.937	.815	.579
	N	180	180	180	180	180	180	180
ps_perc	Pearson Correlation	.018	.029	-.010	.030	-.003	.027	.072
	Sig. (2-tailed)	.811	.694	.892	.689	.965	.723	.339
	N	180	180	180	180	180	180	180
tot_perc	Pearson Correlation	.041	.022	-.018	.041	.019	.022	.047
	Sig. (2-tailed)	.583	.770	.813	.587	.805	.771	.528
	N	180	180	180	180	180	180	180
gender	Pearson Correlation	-.113	-.069	-.027	.030	-.084	.072	.029
	Sig. (2-tailed)	.126	.350	.720	.689	.256	.332	.692
	N	185	185	185	185	185	185	185

Predictor and Criterion Variables - Officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Birth_Yr	Pearson Correlation	.281*	.211	.197	.057	.142	.073	.009
	Sig. (2-tailed)	.020	.084	.108	.645	.249	.554	.941
	N	68	68	68	68	68	68	68
edulevel	Pearson Correlation	.102	.086	-.063	.082	-.155	-.113	.143
	Sig. (2-tailed)	.403	.482	.605	.505	.203	.354	.242
	N	69	69	69	69	69	69	69
language	Pearson Correlation	.083	-.076	-.118	-.243	.310*	.088	-.050
	Sig. (2-tailed)	.555	.588	.400	.079	.024	.532	.722
	N	53	53	53	53	53	53	53

Predictor and Criterion Variables - Officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
leader	Pearson Correlation	.030	-.153	-.018	.054	-.233*	-.040	.046
	Sig. (2-tailed)	.753	.111	.849	.577	.014	.676	.631
	N	110	110	110	110	110	110	110
insp	Pearson Correlation	.000	-.100	-.145	.106	-.126	-.087	.142
	Sig. (2-tailed)	.997	.300	.132	.272	.189	.364	.138
	N	110	110	110	110	110	110	110
support	Pearson Correlation	.082	.001	-.044	.119	-.045	.027	.019
	Sig. (2-tailed)	.393	.993	.650	.216	.642	.777	.845
	N	110	110	110	110	110	110	110
standard	Pearson Correlation	.028	-.051	-.177	.084	-.164	-.004	.096
	Sig. (2-tailed)	.770	.595	.064	.385	.087	.969	.316
	N	110	110	110	110	110	110	110
contextual	Pearson Correlation	.048	-.055	-.107	.129	-.097	-.033	.091
	Sig. (2-tailed)	.620	.565	.268	.181	.314	.732	.346
	N	110	110	110	110	110	110	110
task	Pearson Correlation	.036	-.126	-.118	.084	-.244*	-.027	.087
	Sig. (2-tailed)	.711	.190	.221	.385	.010	.776	.368
	N	110	110	110	110	110	110	110
total	Pearson Correlation	.052	-.097	-.118	.116	-.183	-.032	.096
	Sig. (2-tailed)	.592	.315	.221	.228	.055	.743	.317
	N	110	110	110	110	110	110	110
N1 Nervous and Stressed Out	Pearson Correlation	.403**	-.096	-.118	-.247**	.097	-.071	-.170*
	Sig. (2-tailed)	.000	.178	.097	.000	.171	.320	.016
	N	200	200	200	200	200	200	200
N2 Worrying	Pearson Correlation	.382**	-.109	-.044	-.135	.088	-.072	-.114
	Sig. (2-tailed)	.000	.126	.535	.057	.215	.312	.108
	N	200	200	200	200	200	200	200
N3 Irritable	Pearson Correlation	.467**	-.169*	-.195**	-.216**	.031	-.173*	-.399**
	Sig. (2-tailed)	.000	.016	.006	.002	.662	.014	.000
	N	200	200	200	200	200	200	200
N4 Envious and Jealous	Pearson Correlation	.387**	-.193**	-.126	-.202**	.045	-.159*	-.269**
	Sig. (2-tailed)	.000	.006	.075	.004	.523	.025	.000
	N	200	200	200	200	200	200	200

Predictor and Criterion Variables - Officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
E1 Shy and Bashful	Pearson Correlation	.551**	-.136	-.139*	-.268**	.072	-.014	-.249**
	Sig. (2-tailed)	.000	.056	.050	.000	.312	.839	.000
	N	200	200	200	200	200	200	200
E2 Talkative	Pearson Correlation	-.424**	.188**	.135	.215**	.103	-.080	.455**
	Sig. (2-tailed)	.000	.008	.056	.002	.148	.260	.000
	N	200	200	200	200	200	200	200
E3 Socially Active	Pearson Correlation	-.580**	.107	.145*	.375**	.141*	-.031	.511**
	Sig. (2-tailed)	.000	.131	.040	.000	.047	.667	.000
	N	200	200	200	200	200	200	200
E4 Assertive	Pearson Correlation	.074	.471**	.309**	.192**	.406**	.193**	.040
	Sig. (2-tailed)	.296	.000	.000	.007	.000	.006	.576
	N	200	200	200	200	200	200	200
e5recode	Pearson Correlation	1	-.024	-.030	-.286**	.067	.012	-.429**
	Sig. (2-tailed)		.739	.675	.000	.347	.862	.000
	N	200	200	200	200	200	200	200
O1 Philosophical	Pearson Correlation	-.024	1	.608**	.386**	.602**	.445**	.143*
	Sig. (2-tailed)	.739		.000	.000	.000	.000	.043
	N	200	200	200	200	200	200	200
O2 Scientific Interest	Pearson Correlation	-.030	.608**	1	.407**	.500**	.438**	.186**
	Sig. (2-tailed)	.675	.000		.000	.000	.000	.008
	N	200	200	200	200	200	200	200
O3 Creative	Pearson Correlation	-.286**	.386**	.407**	1	.258**	.219**	.381**
	Sig. (2-tailed)	.000	.000	.000		.000	.002	.000
	N	200	200	200	200	200	200	200
O4 Reflective	Pearson Correlation	.067	.602**	.500**	.258**	1	.341**	.156*
	Sig. (2-tailed)	.347	.000	.000	.000		.000	.028
	N	200	200	200	200	200	200	200
O5 Cultured	Pearson Correlation	.012	.445**	.438**	.219**	.341**	1	.005
	Sig. (2-tailed)	.862	.000	.000	.002	.000		.942
	N	200	200	200	200	200	200	200
A1 Friendly	Pearson Correlation	-.429**	.143*	.186**	.381**	.156*	.005	1
	Sig. (2-tailed)	.000	.043	.008	.000	.028	.942	
	N	200	200	200	200	200	200	200

Predictor and Criterion Variables - Officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
A2 Considerate	Pearson Correlation	-.147*	.210**	.212**	.174*	.166*	.132	.579**
	Sig. (2-tailed)	.037	.003	.003	.014	.019	.062	.000
	N	200	200	200	200	200	200	200
A3 Cold and Insensitive	Pearson Correlation	-.455**	.155*	.104	.217**	.077	.083	.443**
	Sig. (2-tailed)	.000	.029	.145	.002	.283	.245	.000
	N	199	199	199	199	199	199	199
A4 Helpful	Pearson Correlation	-.205**	.216**	.189**	.346**	.247**	.056	.565**
	Sig. (2-tailed)	.004	.002	.007	.000	.000	.433	.000
	N	200	200	200	200	200	200	200
A5 Warm and Sympathetic	Pearson Correlation	-.346**	.269**	.212**	.357**	.205**	.097	.587**
	Sig. (2-tailed)	.000	.000	.003	.000	.004	.174	.000
	N	200	200	200	200	200	200	200
C1 Efficient and Dependable	Pearson Correlation	-.298**	.213**	.177*	.457**	.159*	.113	.265**
	Sig. (2-tailed)	.000	.002	.012	.000	.025	.110	.000
	N	200	200	200	200	200	200	200
C2 Hard Working	Pearson Correlation	-.211**	.299**	.222**	.374**	.249**	.134	.307**
	Sig. (2-tailed)	.003	.000	.002	.000	.000	.059	.000
	N	200	200	200	200	200	200	200
C3 Organized	Pearson Correlation	-.249**	.208**	.165*	.384**	.082	.103	.226**
	Sig. (2-tailed)	.000	.003	.020	.000	.247	.148	.001
	N	200	200	200	200	200	200	200
Scores for N_IPIP	Pearson Correlation	.421**	-.249**	-.158*	-.255**	.009	-.129	-.336**
	Sig. (2-tailed)	.000	.000	.026	.000	.904	.071	.000
	N	198	198	198	198	198	198	198
Scores for E_IPIP	Pearson Correlation	-.601**	.197**	.180*	.385**	.065	.000	.488**
	Sig. (2-tailed)	.000	.005	.011	.000	.361	.997	.000
	N	198	198	198	198	198	198	198
Scores for O_IPIP	Pearson Correlation	-.241**	.615**	.543**	.510**	.502**	.313**	.301**
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000	.000
	N	198	198	198	198	198	198	198
Scores for A_IPIP	Pearson Correlation	-.389**	.321**	.207**	.384**	.265**	.099	.564**
	Sig. (2-tailed)	.000	.000	.003	.000	.000	.165	.000
	N	198	198	198	198	198	198	198

Predictor and Criterion Variables - Officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Scores for C_IPIP	Pearson Correlation	-.305**	.295**	.228**	.330**	.063	.155*	.227**
	Sig. (2-tailed)	.000	.000	.001	.000	.376	.029	.001
	N	198	198	198	198	198	198	198
Scores for N_TSD	Pearson Correlation	.470**	-.145	-.159*	-.195*	.147	-.108	-.220**
	Sig. (2-tailed)	.000	.064	.042	.012	.059	.166	.004
	N	165	165	165	165	165	165	165
Scores for E_TSD	Pearson Correlation	-.766**	.200**	.223**	.380**	.001	.011	.471**
	Sig. (2-tailed)	.000	.010	.004	.000	.994	.890	.000
	N	167	167	167	167	167	167	167
Scores for O_TSD	Pearson Correlation	-.049	.880**	.825**	.507**	.757**	.600**	.216**
	Sig. (2-tailed)	.523	.000	.000	.000	.000	.000	.004
	N	171	171	171	171	171	171	171
Scores for A_TSD	Pearson Correlation	-.483**	.240**	.194*	.380**	.162*	.101	.762**
	Sig. (2-tailed)	.000	.002	.012	.000	.037	.194	.000
	N	167	167	167	167	167	167	167
Scores for C_TSD	Pearson Correlation	-.270**	.233**	.211**	.382**	.125	.122	.263**
	Sig. (2-tailed)	.000	.002	.006	.000	.106	.115	.001
	N	167	167	167	167	167	167	167
vs_perc	Pearson Correlation	-.023	.028	-.018	.112	.072	.098	-.009
	Sig. (2-tailed)	.762	.713	.808	.134	.338	.190	.908
	N	180	180	180	180	180	180	180
sa_perc	Pearson Correlation	.113	-.046	.004	.153*	.061	.005	.034
	Sig. (2-tailed)	.130	.542	.960	.040	.420	.944	.648
	N	180	180	180	180	180	180	180
ps_perc	Pearson Correlation	-.010	.033	.107	.182*	.073	-.004	.063
	Sig. (2-tailed)	.891	.659	.152	.014	.332	.959	.403
	N	180	180	180	180	180	180	180
tot_perc	Pearson Correlation	.009	.014	.071	.229**	.087	.039	.068
	Sig. (2-tailed)	.902	.847	.346	.002	.245	.599	.361
	N	180	180	180	180	180	180	180
gender	Pearson Correlation	-.010	.048	.076	.037	.133	.077	.021
	Sig. (2-tailed)	.889	.513	.303	.619	.071	.299	.775
	N	185	185	185	185	185	185	185

Predictor and Criterion Variables - Officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Birth_Yr	Pearson Correlation	.142	.028	-.024	-.069	-.040	-.149	-.040
	Sig. (2-tailed)	.249	.824	.849	.576	.743	.226	.748
	N	68	68	68	68	68	68	68
edulevel	Pearson Correlation	.067	.118	.010	.133	.068	.048	-.116
	Sig. (2-tailed)	.583	.333	.936	.274	.579	.693	.341
	N	69	69	69	69	69	69	69
language	Pearson Correlation	.008	.197	.076	.181	.042	-.031	.139
	Sig. (2-tailed)	.955	.157	.591	.196	.765	.827	.319
	N	53	53	53	53	53	53	53

Predictor and Criterion Variables - Officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
leader	Pearson Correlation	.037	-.027	-.056	-.045	-.138	-.149	-.056
	Sig. (2-tailed)	.704	.782	.559	.640	.151	.121	.560
	N	110	109	110	110	110	110	110
insp	Pearson Correlation	-.014	.048	.035	-.008	-.021	-.104	-.027
	Sig. (2-tailed)	.888	.620	.717	.932	.826	.280	.778
	N	110	109	110	110	110	110	110
support	Pearson Correlation	.101	.050	.051	.029	-.084	-.083	-.102
	Sig. (2-tailed)	.295	.609	.600	.767	.383	.391	.288
	N	110	109	110	110	110	110	110
standard	Pearson Correlation	.121	.176	.091	.044	-.041	-.005	-.003
	Sig. (2-tailed)	.207	.066	.347	.646	.674	.958	.976
	N	110	109	110	110	110	110	110
contextual	Pearson Correlation	.051	.056	.049	.012	-.061	-.106	-.075
	Sig. (2-tailed)	.596	.566	.611	.900	.527	.268	.437
	N	110	109	110	110	110	110	110
task	Pearson Correlation	.095	.089	.019	-.002	-.110	-.096	-.037
	Sig. (2-tailed)	.322	.358	.843	.987	.251	.319	.703
	N	110	109	110	110	110	110	110
total	Pearson Correlation	.081	.078	.036	.010	-.092	-.112	-.059
	Sig. (2-tailed)	.399	.420	.705	.922	.341	.245	.541
	N	110	109	110	110	110	110	110
N1 Nervous and Stressed Out	Pearson Correlation	.010	-.080	-.129	-.010	-.390**	-.392**	-.304**
	Sig. (2-tailed)	.892	.263	.069	.889	.000	.000	.000
	N	200	199	200	200	200	200	200
N2 Worrying	Pearson Correlation	.076	-.141*	.005	.003	-.304**	-.230**	-.195**
	Sig. (2-tailed)	.284	.047	.940	.969	.000	.001	.006
	N	200	199	200	200	200	200	200
N3 Irritable	Pearson Correlation	-.288**	-.489**	-.228**	-.307**	-.385**	-.288**	-.241**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.001
	N	200	199	200	200	200	200	200
N4 Envious and Jealous	Pearson Correlation	-.208**	-.343**	-.179*	-.266**	-.414**	-.279**	-.243**
	Sig. (2-tailed)	.003	.000	.011	.000	.000	.000	.001
	N	200	199	200	200	200	200	200

Predictor and Criterion Variables - Officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
E1 Shy and Bashful	Pearson Correlation	-.013	-.304**	-.060	-.126	-.204**	-.175*	-.208**
	Sig. (2-tailed)	.856	.000	.400	.076	.004	.013	.003
	N	200	199	200	200	200	200	200
E2 Talkative	Pearson Correlation	.287**	.374**	.359**	.454**	.147*	.199**	.179*
	Sig. (2-tailed)	.000	.000	.000	.000	.038	.005	.011
	N	200	199	200	200	200	200	200
E3 Socially Active	Pearson Correlation	.249**	.224**	.460**	.419**	.214**	.329**	.293**
	Sig. (2-tailed)	.000	.001	.000	.000	.002	.000	.000
	N	200	199	200	200	200	200	200
E4 Assertive	Pearson Correlation	.059	-.108	.083	-.007	-.035	.155*	.024
	Sig. (2-tailed)	.406	.128	.240	.917	.619	.028	.738
	N	200	199	200	200	200	200	200
e5recode	Pearson Correlation	-.147*	-.455**	-.205**	-.346**	-.298**	-.211**	-.249**
	Sig. (2-tailed)	.037	.000	.004	.000	.000	.003	.000
	N	200	199	200	200	200	200	200
O1 Philosophical	Pearson Correlation	.210**	.155*	.216**	.269**	.213**	.299**	.208**
	Sig. (2-tailed)	.003	.029	.002	.000	.002	.000	.003
	N	200	199	200	200	200	200	200
O2 Scientific Interest	Pearson Correlation	.212**	.104	.189**	.212**	.177*	.222**	.165*
	Sig. (2-tailed)	.003	.145	.007	.003	.012	.002	.020
	N	200	199	200	200	200	200	200
O3 Creative	Pearson Correlation	.174*	.217**	.346**	.357**	.457**	.374**	.384**
	Sig. (2-tailed)	.014	.002	.000	.000	.000	.000	.000
	N	200	199	200	200	200	200	200
O4 Reflective	Pearson Correlation	.166*	.077	.247**	.205**	.159*	.249**	.082
	Sig. (2-tailed)	.019	.283	.000	.004	.025	.000	.247
	N	200	199	200	200	200	200	200
O5 Cultured	Pearson Correlation	.132	.083	.056	.097	.113	.134	.103
	Sig. (2-tailed)	.062	.245	.433	.174	.110	.059	.148
	N	200	199	200	200	200	200	200
A1 Friendly	Pearson Correlation	.579**	.443**	.565**	.587**	.265**	.307**	.226**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001
	N	200	199	200	200	200	200	200

Predictor and Criterion Variables - Officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
A2 Considerate	Pearson Correlation	1	.431**	.622**	.612**	.191**	.254**	.161*
	Sig. (2-tailed)		.000	.000	.000	.007	.000	.023
	N	200	199	200	200	200	200	200
A3 Cold and Insensitive	Pearson Correlation	.431**	1	.414**	.611**	.203**	.144*	.128
	Sig. (2-tailed)	.000		.000	.000	.004	.042	.071
	N	199	199	199	199	199	199	199
A4 Helpful	Pearson Correlation	.622**	.414**	1	.570**	.237**	.304**	.250**
	Sig. (2-tailed)	.000	.000		.000	.001	.000	.000
	N	200	199	200	200	200	200	200
A5 Warm and Sympathetic	Pearson Correlation	.612**	.611**	.570**	1	.391**	.230**	.266**
	Sig. (2-tailed)	.000	.000	.000		.000	.001	.000
	N	200	199	200	200	200	200	200
C1 Efficient and Dependable	Pearson Correlation	.191**	.203**	.237**	.391**	1	.591**	.634**
	Sig. (2-tailed)	.007	.004	.001	.000		.000	.000
	N	200	199	200	200	200	200	200
C2 Hard Working	Pearson Correlation	.254**	.144*	.304**	.230**	.591**	1	.587**
	Sig. (2-tailed)	.000	.042	.000	.001	.000		.000
	N	200	199	200	200	200	200	200
C3 Organized	Pearson Correlation	.161*	.128	.250**	.266**	.634**	.587**	1
	Sig. (2-tailed)	.023	.071	.000	.000	.000	.000	
	N	200	199	200	200	200	200	200
Scores for N_IPIP	Pearson Correlation	-.183**	-.224**	-.155*	-.129	-.351**	-.378**	-.303**
	Sig. (2-tailed)	.010	.002	.029	.070	.000	.000	.000
	N	198	197	198	198	198	198	198
Scores for E_IPIP	Pearson Correlation	.223**	.336**	.349**	.352**	.161*	.244**	.260**
	Sig. (2-tailed)	.002	.000	.000	.000	.023	.001	.000
	N	198	197	198	198	198	198	198
Scores for O_IPIP	Pearson Correlation	.175*	.244**	.223**	.220**	.264**	.288**	.193**
	Sig. (2-tailed)	.014	.001	.002	.002	.000	.000	.006
	N	198	197	198	198	198	198	198
Scores for A_IPIP	Pearson Correlation	.618**	.562**	.639**	.649**	.161*	.253**	.197**
	Sig. (2-tailed)	.000	.000	.000	.000	.023	.000	.005
	N	198	197	198	198	198	198	198

Predictor and Criterion Variables - Officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Scores for C_IPIP	Pearson Correlation	.217**	.163*	.136	.152*	.518**	.585**	.698**
	Sig. (2-tailed)	.002	.022	.057	.033	.000	.000	.000
	N	198	197	198	198	198	198	198
Scores for N_TSD	Pearson Correlation	-.120	-.242**	-.105	-.116	-.412**	-.320**	-.266**
	Sig. (2-tailed)	.126	.002	.181	.138	.000	.000	.001
	N	165	165	165	165	165	165	165
Scores for E_TSD	Pearson Correlation	.208**	.416**	.315**	.353**	.300**	.302**	.295**
	Sig. (2-tailed)	.007	.000	.000	.000	.000	.000	.000
	N	167	167	167	167	167	167	167
Scores for O_TSD	Pearson Correlation	.278**	.182*	.249**	.301**	.240**	.337**	.229**
	Sig. (2-tailed)	.000	.017	.001	.000	.002	.000	.003
	N	171	171	171	171	171	171	171
Scores for A_TSD	Pearson Correlation	.765**	.807**	.695**	.874**	.340**	.298**	.239**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.002
	N	167	167	167	167	167	167	167
Scores for C_TSD	Pearson Correlation	.244**	.213**	.258**	.387**	.900**	.810**	.872**
	Sig. (2-tailed)	.001	.006	.001	.000	.000	.000	.000
	N	167	167	167	167	167	167	167
vs_perc	Pearson Correlation	-.007	.003	.076	-.011	.048	.060	.101
	Sig. (2-tailed)	.923	.964	.313	.888	.522	.421	.177
	N	180	179	180	180	180	180	180
sa_perc	Pearson Correlation	.030	-.025	-.003	.034	.101	.058	.072
	Sig. (2-tailed)	.693	.738	.967	.647	.178	.439	.335
	N	180	179	180	180	180	180	180
ps_perc	Pearson Correlation	.021	-.041	.016	.101	.107	-.005	.096
	Sig. (2-tailed)	.781	.584	.834	.175	.152	.942	.198
	N	180	179	180	180	180	180	180
tot_perc	Pearson Correlation	.029	-.003	.057	.069	.133	.042	.119
	Sig. (2-tailed)	.697	.967	.449	.356	.076	.573	.113
	N	180	179	180	180	180	180	180
gender	Pearson Correlation	.072	.007	.080	.029	.029	.005	.028
	Sig. (2-tailed)	.329	.927	.277	.692	.699	.941	.703
	N	185	184	185	185	185	185	185

Predictor and Criterion Variables - Officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Birth_Yr	Pearson Correlation	.103	.011	.098	.079	-.247*	.003	.061
	Sig. (2-tailed)	.404	.931	.426	.523	.042	.983	.622
	N	68	68	68	68	68	68	68
edulevel	Pearson Correlation	.043	-.056	-.035	-.041	-.003	-.002	.064
	Sig. (2-tailed)	.724	.648	.774	.737	.982	.988	.601
	N	69	69	69	69	69	69	69
language	Pearson Correlation	.179	.385**	.117	.201	-.059	.179	.116
	Sig. (2-tailed)	.200	.004	.405	.149	.676	.199	.407
	N	53	53	53	53	53	53	53

Predictor and Criterion Variables - Officers

Correlations

		nipitransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
leader	Pearson Correlation	.122	.145	-.064	-.005	-.058	.012	.132
	Sig. (2-tailed)	.205	.134	.509	.958	.551	.911	.205
	N	109	109	109	109	109	94	94
insp	Pearson Correlation	.081	.071	-.038	.008	-.023	-.015	.034
	Sig. (2-tailed)	.402	.461	.694	.933	.810	.888	.745
	N	109	109	109	109	109	94	94
support	Pearson Correlation	.153	-.010	.011	.072	-.126	.090	-.016
	Sig. (2-tailed)	.111	.917	.912	.455	.193	.390	.877
	N	109	109	109	109	109	94	94
standard	Pearson Correlation	.017	.020	-.115	.075	.025	-.040	-.041
	Sig. (2-tailed)	.863	.834	.234	.438	.795	.700	.693
	N	109	109	109	109	109	94	94
contextual	Pearson Correlation	.135	.034	-.015	.047	-.086	.044	.009
	Sig. (2-tailed)	.163	.724	.875	.630	.373	.677	.932
	N	109	109	109	109	109	94	94
task	Pearson Correlation	.086	.102	-.109	.042	-.021	-.018	.056
	Sig. (2-tailed)	.373	.291	.260	.665	.830	.866	.591
	N	109	109	109	109	109	94	94
total	Pearson Correlation	.122	.074	-.070	.044	-.059	.014	.035
	Sig. (2-tailed)	.207	.445	.468	.646	.543	.893	.736
	N	109	109	109	109	109	94	94
N1 Nervous and Stressed Out	Pearson Correlation	.685**	-.303**	-.263**	-.053	-.410**	.892**	-.484**
	Sig. (2-tailed)	.000	.000	.000	.461	.000	.000	.000
	N	198	198	198	198	198	165	167
N2 Worrying	Pearson Correlation	.689**	-.222**	-.254**	-.005	-.290**	.843**	-.489**
	Sig. (2-tailed)	.000	.002	.000	.942	.000	.000	.000
	N	198	198	198	198	198	165	167
N3 Irritable	Pearson Correlation	.656**	-.315**	-.327**	-.318**	-.390**	.800**	-.520**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	198	198	198	198	198	165	167
N4 Envious and Jealous	Pearson Correlation	.517**	-.202**	-.238**	-.239**	-.355**	.753**	-.433**
	Sig. (2-tailed)	.000	.004	.001	.001	.000	.000	.000
	N	198	198	198	198	198	165	167

Predictor and Criterion Variables - Officers

Correlations

		nipitransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
E1 Shy and Bashful	Pearson Correlation	.447**	-.633**	-.317**	-.181*	-.267**	.592**	-.873**
	Sig. (2-tailed)	.000	.000	.000	.011	.000	.000	.000
	N	198	198	198	198	198	165	167
E2 Talkative	Pearson Correlation	-.142*	.709**	.183**	.462**	.167*	-.104	.722**
	Sig. (2-tailed)	.046	.000	.010	.000	.019	.183	.000
	N	198	198	198	198	198	165	167
E3 Socially Active	Pearson Correlation	-.249**	.729**	.195**	.453**	.246**	-.161*	.735**
	Sig. (2-tailed)	.000	.000	.006	.000	.000	.039	.000
	N	198	198	198	198	198	165	167
E4 Assertive	Pearson Correlation	-.124	.147*	.260**	.153*	.072	-.034	.066
	Sig. (2-tailed)	.082	.039	.000	.032	.316	.668	.400
	N	198	198	198	198	198	165	167
e5recode	Pearson Correlation	.421**	-.601**	-.241**	-.389**	-.305**	.470**	-.766**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.000
	N	198	198	198	198	198	165	167
O1 Philosophical	Pearson Correlation	-.249**	.197**	.615**	.321**	.295**	-.145	.200**
	Sig. (2-tailed)	.000	.005	.000	.000	.000	.064	.010
	N	198	198	198	198	198	165	167
O2 Scientific Interest	Pearson Correlation	-.158*	.180*	.543**	.207**	.228**	-.159*	.223**
	Sig. (2-tailed)	.026	.011	.000	.003	.001	.042	.004
	N	198	198	198	198	198	165	167
O3 Creative	Pearson Correlation	-.255**	.385**	.510**	.384**	.330**	-.195*	.380**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.012	.000
	N	198	198	198	198	198	165	167
O4 Reflective	Pearson Correlation	.009	.065	.502**	.265**	.063	.147	.001
	Sig. (2-tailed)	.904	.361	.000	.000	.376	.059	.994
	N	198	198	198	198	198	165	167
O5 Cultured	Pearson Correlation	-.129	.000	.313**	.099	.155*	-.108	.011
	Sig. (2-tailed)	.071	.997	.000	.165	.029	.166	.890
	N	198	198	198	198	198	165	167
A1 Friendly	Pearson Correlation	-.336**	.488**	.301**	.564**	.227**	-.220**	.471**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.004	.000
	N	198	198	198	198	198	165	167

Predictor and Criterion Variables - Officers

Correlations

		nipitransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
A2 Considerate	Pearson Correlation	-.183**	.223**	.175*	.618**	.217**	-.120	.208**
	Sig. (2-tailed)	.010	.002	.014	.000	.002	.126	.007
	N	198	198	198	198	198	165	167
A3 Cold and Insensitive	Pearson Correlation	-.224**	.336**	.244**	.562**	.163*	-.242**	.416**
	Sig. (2-tailed)	.002	.000	.001	.000	.022	.002	.000
	N	197	197	197	197	197	165	167
A4 Helpful	Pearson Correlation	-.155*	.349**	.223**	.639**	.136	-.105	.315**
	Sig. (2-tailed)	.029	.000	.002	.000	.057	.181	.000
	N	198	198	198	198	198	165	167
A5 Warm and Sympathetic	Pearson Correlation	-.129	.352**	.220**	.649**	.152*	-.116	.353**
	Sig. (2-tailed)	.070	.000	.002	.000	.033	.138	.000
	N	198	198	198	198	198	165	167
C1 Efficient and Dependable	Pearson Correlation	-.351**	.161*	.264**	.161*	.518**	-.412**	.300**
	Sig. (2-tailed)	.000	.023	.000	.023	.000	.000	.000
	N	198	198	198	198	198	165	167
C2 Hard Working	Pearson Correlation	-.378**	.244**	.288**	.253**	.585**	-.320**	.302**
	Sig. (2-tailed)	.000	.001	.000	.000	.000	.000	.000
	N	198	198	198	198	198	165	167
C3 Organized	Pearson Correlation	-.303**	.260**	.193**	.197**	.698**	-.266**	.295**
	Sig. (2-tailed)	.000	.000	.006	.005	.000	.001	.000
	N	198	198	198	198	198	165	167
Scores for N_IPIP	Pearson Correlation	1	-.330**	-.345**	-.228**	-.507**	.782**	-.513**
	Sig. (2-tailed)		.000	.000	.001	.000	.000	.000
	N	198	198	198	198	198	164	166
Scores for E_IPIP	Pearson Correlation	-.330**	1	.318**	.492**	.260**	-.283**	.837**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	198	198	198	198	198	164	166
Scores for O_IPIP	Pearson Correlation	-.345**	.318**	1	.340**	.342**	-.215**	.348**
	Sig. (2-tailed)	.000	.000		.000	.000	.006	.000
	N	198	198	198	198	198	164	166
Scores for A_IPIP	Pearson Correlation	-.228**	.492**	.340**	1	.335**	-.128	.411**
	Sig. (2-tailed)	.001	.000	.000		.000	.102	.000
	N	198	198	198	198	198	164	166

Predictor and Criterion Variables - Officers

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Scores for C_IPIP	Pearson Correlation	-.507**	.260**	.342**	.335**	1	-.408**	.344**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	198	198	198	198	198	164	166
Scores for N_TSD	Pearson Correlation	.782**	-.283**	-.215**	-.128	-.408**	1	-.562**
	Sig. (2-tailed)	.000	.000	.006	.102	.000		.000
	N	164	164	164	164	164	165	147
Scores for E_TSD	Pearson Correlation	-.513**	.837**	.348**	.411**	.344**	-.562**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	166	166	166	166	166	147	167
Scores for O_TSD	Pearson Correlation	-.187*	.198**	.678**	.322**	.252**	-.123	.218**
	Sig. (2-tailed)	.015	.010	.000	.000	.001	.136	.007
	N	170	170	170	170	170	149	152
Scores for A_TSD	Pearson Correlation	-.275**	.501**	.237**	.775**	.241**	-.263**	.518**
	Sig. (2-tailed)	.000	.000	.002	.000	.002	.001	.000
	N	167	167	167	167	167	149	147
Scores for C_TSD	Pearson Correlation	-.369**	.231**	.182*	.188*	.674**	-.457**	.333**
	Sig. (2-tailed)	.000	.003	.019	.015	.000	.000	.000
	N	166	166	166	166	166	145	150
vs_perc	Pearson Correlation	.000	.009	.047	.086	.058	.118	-.030
	Sig. (2-tailed)	.995	.905	.534	.256	.440	.149	.709
	N	178	178	178	178	178	150	156
sa_perc	Pearson Correlation	.029	-.058	.007	-.045	-.045	.074	-.057
	Sig. (2-tailed)	.699	.444	.927	.551	.549	.369	.480
	N	178	178	178	178	178	150	156
ps_perc	Pearson Correlation	.056	-.001	.067	-.001	.000	.024	-.014
	Sig. (2-tailed)	.460	.984	.374	.985	.999	.772	.864
	N	178	178	178	178	178	150	156
tot_perc	Pearson Correlation	.033	-.012	.077	.028	.009	.052	-.024
	Sig. (2-tailed)	.662	.877	.309	.713	.902	.527	.771
	N	178	178	178	178	178	150	156
gender	Pearson Correlation	-.087	.002	.053	.072	.057	-.044	.013
	Sig. (2-tailed)	.241	.982	.476	.333	.442	.585	.869
	N	183	183	183	183	183	154	158

Predictor and Criterion Variables - Officers

Correlations

		nipitransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Birth_Yr	Pearson Correlation	.061	.090	-.033	.074	-.029	.228	.009
	Sig. (2-tailed)	.628	.475	.792	.557	.818	.080	.946
	N	66	66	66	66	66	60	57
edulevel	Pearson Correlation	.017	-.044	.114	.016	.007	.039	-.081
	Sig. (2-tailed)	.889	.723	.357	.899	.955	.764	.542
	N	68	68	68	68	68	62	59
language	Pearson Correlation	-.009	.252	.026	.253	.208	.002	.238
	Sig. (2-tailed)	.949	.071	.856	.070	.140	.991	.119
	N	52	52	52	52	52	47	44

Predictor and Criterion Variables - Officers

Correlations

		Scores for O TSD	Scores for A TSD	Scores for C TSD	vs perc	sa perc	ps perc	tot perc	gender
leader	Pearson Correlation	-.129	.030	-.126	-.066	.204*	.202*	.182	-.250**
	Sig. (2-tailed)	.218	.774	.225	.510	.040	.042	.067	.010
	N	93	97	95	102	102	102	102	106
insp	Pearson Correlation	-.079	.044	-.040	-.093	-.004	.123	.068	-.205*
	Sig. (2-tailed)	.453	.669	.697	.351	.969	.217	.499	.035
	N	93	97	95	102	102	102	102	106
support	Pearson Correlation	.052	.057	-.165	.049	.243*	.185	.183	-.010
	Sig. (2-tailed)	.620	.577	.109	.625	.014	.063	.066	.919
	N	93	97	95	102	102	102	102	106
standard	Pearson Correlation	-.052	.127	-.021	.014	.149	.069	.083	-.074
	Sig. (2-tailed)	.619	.216	.843	.892	.134	.493	.410	.452
	N	93	97	95	102	102	102	102	106
contextual	Pearson Correlation	-.014	.057	-.118	-.024	.140	.178	.145	-.122
	Sig. (2-tailed)	.892	.577	.254	.811	.161	.074	.145	.213
	N	93	97	95	102	102	102	102	106
task	Pearson Correlation	-.112	.094	-.090	-.033	.217*	.167	.163	-.202*
	Sig. (2-tailed)	.286	.358	.385	.743	.029	.094	.101	.038
	N	93	97	95	102	102	102	102	106
total	Pearson Correlation	-.069	.082	-.112	-.038	.194	.182	.162	-.167
	Sig. (2-tailed)	.509	.425	.281	.704	.050	.066	.104	.087
	N	93	97	95	102	102	102	102	106
N1 Nervous and Stressed Out	Pearson Correlation	-.082	-.123	-.428**	.004	.094	.045	.037	-.005
	Sig. (2-tailed)	.285	.115	.000	.953	.210	.548	.617	.944
	N	171	167	167	180	180	180	180	185
N2 Worrying	Pearson Correlation	-.063	-.066	-.267**	.098	.067	.018	.041	-.113
	Sig. (2-tailed)	.412	.395	.000	.189	.371	.811	.583	.126
	N	171	167	167	180	180	180	180	185
N3 Irritable	Pearson Correlation	-.202**	-.507**	-.404**	.030	.050	.029	.022	-.069
	Sig. (2-tailed)	.008	.000	.000	.688	.507	.694	.770	.350
	N	171	167	167	180	180	180	180	185
N4 Envious and Jealous	Pearson Correlation	-.191*	-.348**	-.414**	.076	-.018	-.010	-.018	-.027
	Sig. (2-tailed)	.012	.000	.000	.312	.815	.892	.813	.720
	N	171	167	167	180	180	180	180	185

Predictor and Criterion Variables - Officers

Correlations

		Scores for O TSD	Scores for A TSD	Scores for C TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
E1 Shy and Bashful	Pearson Correlation	-.153*	-.264**	-.248**	.076	.050	.030	.041	.030
	Sig. (2-tailed)	.046	.001	.001	.312	.506	.689	.587	.689
	N	171	167	167	180	180	180	180	185
E2 Talkative	Pearson Correlation	.190*	.528**	.208**	.042	.006	-.003	.019	-.084
	Sig. (2-tailed)	.013	.000	.007	.575	.937	.965	.805	.256
	N	171	167	167	180	180	180	180	185
E3 Socially Active	Pearson Correlation	.139	.483**	.255**	.000	.018	.027	.022	.072
	Sig. (2-tailed)	.071	.000	.001	1.000	.815	.723	.771	.332
	N	171	167	167	180	180	180	180	185
E4 Assertive	Pearson Correlation	.501**	.035	.028	.072	.042	.072	.047	.029
	Sig. (2-tailed)	.000	.657	.718	.340	.579	.339	.528	.692
	N	171	167	167	180	180	180	180	185
e5recode	Pearson Correlation	-.049	-.483**	-.270**	-.023	.113	-.010	.009	-.010
	Sig. (2-tailed)	.523	.000	.000	.762	.130	.891	.902	.889
	N	171	167	167	180	180	180	180	185
O1 Philosophical	Pearson Correlation	.880**	.240**	.233**	.028	-.046	.033	.014	.048
	Sig. (2-tailed)	.000	.002	.002	.713	.542	.659	.847	.513
	N	171	167	167	180	180	180	180	185
O2 Scientific Interest	Pearson Correlation	.825**	.194*	.211**	-.018	.004	.107	.071	.076
	Sig. (2-tailed)	.000	.012	.006	.808	.960	.152	.346	.303
	N	171	167	167	180	180	180	180	185
O3 Creative	Pearson Correlation	.507**	.380**	.382**	.112	.153*	.182*	.229**	.037
	Sig. (2-tailed)	.000	.000	.000	.134	.040	.014	.002	.619
	N	171	167	167	180	180	180	180	185
O4 Reflective	Pearson Correlation	.757**	.162*	.125	.072	.061	.073	.087	.133
	Sig. (2-tailed)	.000	.037	.106	.338	.420	.332	.245	.071
	N	171	167	167	180	180	180	180	185
O5 Cultured	Pearson Correlation	.600**	.101	.122	.098	.005	-.004	.039	.077
	Sig. (2-tailed)	.000	.194	.115	.190	.944	.959	.599	.299
	N	171	167	167	180	180	180	180	185
A1 Friendly	Pearson Correlation	.216**	.762**	.263**	-.009	.034	.063	.068	.021
	Sig. (2-tailed)	.004	.000	.001	.908	.648	.403	.361	.775
	N	171	167	167	180	180	180	180	185

Predictor and Criterion Variables - Officers

Correlations

		Scores for O TSD	Scores for A TSD	Scores for C TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
A2 Considerate	Pearson Correlation	.278**	.765**	.244**	-.007	.030	.021	.029	.072
	Sig. (2-tailed)	.000	.000	.001	.923	.693	.781	.697	.329
	N	171	167	167	180	180	180	180	185
A3 Cold and Insensitive	Pearson Correlation	.182*	.807**	.213**	.003	-.025	-.041	-.003	.007
	Sig. (2-tailed)	.017	.000	.006	.964	.738	.584	.967	.927
	N	171	167	167	179	179	179	179	184
A4 Helpful	Pearson Correlation	.249**	.695**	.258**	.076	-.003	.016	.057	.080
	Sig. (2-tailed)	.001	.000	.001	.313	.967	.834	.449	.277
	N	171	167	167	180	180	180	180	185
A5 Warm and Sympathetic	Pearson Correlation	.301**	.874**	.387**	-.011	.034	.101	.069	.029
	Sig. (2-tailed)	.000	.000	.000	.888	.647	.175	.356	.692
	N	171	167	167	180	180	180	180	185
C1 Efficient and Dependable	Pearson Correlation	.240**	.340**	.900**	.048	.101	.107	.133	.029
	Sig. (2-tailed)	.002	.000	.000	.522	.178	.152	.076	.699
	N	171	167	167	180	180	180	180	185
C2 Hard Working	Pearson Correlation	.337**	.298**	.810**	.060	.058	-.005	.042	.005
	Sig. (2-tailed)	.000	.000	.000	.421	.439	.942	.573	.941
	N	171	167	167	180	180	180	180	185
C3 Organized	Pearson Correlation	.229**	.239**	.872**	.101	.072	.096	.119	.028
	Sig. (2-tailed)	.003	.002	.000	.177	.335	.198	.113	.703
	N	171	167	167	180	180	180	180	185
Scores for N_IPIP	Pearson Correlation	-.187*	-.275**	-.369**	.000	.029	.056	.033	-.087
	Sig. (2-tailed)	.015	.000	.000	.995	.699	.460	.662	.241
	N	170	167	166	178	178	178	178	183
Scores for E_IPIP	Pearson Correlation	.198**	.501**	.231**	.009	-.058	-.001	-.012	.002
	Sig. (2-tailed)	.010	.000	.003	.905	.444	.984	.877	.982
	N	170	167	166	178	178	178	178	183
Scores for O_IPIP	Pearson Correlation	.678**	.237**	.182*	.047	.007	.067	.077	.053
	Sig. (2-tailed)	.000	.002	.019	.534	.927	.374	.309	.476
	N	170	167	166	178	178	178	178	183
Scores for A_IPIP	Pearson Correlation	.322**	.775**	.188*	.086	-.045	-.001	.028	.072
	Sig. (2-tailed)	.000	.000	.015	.256	.551	.985	.713	.333
	N	170	167	166	178	178	178	178	183

Predictor and Criterion Variables - Officers

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Scores for C_IPIP	Pearson Correlation	.252**	.241**	.674**	.058	-.045	.000	.009	.057
	Sig. (2-tailed)	.001	.002	.000	.440	.549	.999	.902	.442
	N	170	167	166	178	178	178	178	183
Scores for N_TSD	Pearson Correlation	-.123	-.263**	-.457**	.118	.074	.024	.052	-.044
	Sig. (2-tailed)	.136	.001	.000	.149	.369	.772	.527	.585
	N	149	149	145	150	150	150	150	154
Scores for E_TSD	Pearson Correlation	.218**	.518**	.333**	-.030	-.057	-.014	-.024	.013
	Sig. (2-tailed)	.007	.000	.000	.709	.480	.864	.771	.869
	N	152	147	150	156	156	156	156	158
Scores for O_TSD	Pearson Correlation	1	.280**	.286**	.025	.038	.088	.082	.165*
	Sig. (2-tailed)		.000	.000	.756	.638	.278	.310	.037
	N	171	152	150	155	155	155	155	159
Scores for A_TSD	Pearson Correlation	.280**	1	.384**	.013	.013	.050	.058	.024
	Sig. (2-tailed)	.000		.000	.873	.874	.542	.481	.767
	N	152	167	151	151	151	151	151	156
Scores for C_TSD	Pearson Correlation	.286**	.384**	1	.034	.067	.084	.096	.001
	Sig. (2-tailed)	.000	.000		.676	.411	.308	.242	.994
	N	150	151	167	151	151	151	151	155
vs_perc	Pearson Correlation	.025	.013	.034	1	.266**	.194**	.530**	-.052
	Sig. (2-tailed)	.756	.873	.676		.000	.009	.000	.489
	N	155	151	151	180	180	180	180	180
sa_perc	Pearson Correlation	.038	.013	.067	.266**	1	.476**	.720**	-.114
	Sig. (2-tailed)	.638	.874	.411	.000		.000	.000	.127
	N	155	151	151	180	180	180	180	180
ps_perc	Pearson Correlation	.088	.050	.084	.194**	.476**	1	.865**	-.102
	Sig. (2-tailed)	.278	.542	.308	.009	.000		.000	.172
	N	155	151	151	180	180	180	180	180
tot_perc	Pearson Correlation	.082	.058	.096	.530**	.720**	.865**	1	-.114
	Sig. (2-tailed)	.310	.481	.242	.000	.000	.000		.127
	N	155	151	151	180	180	180	180	180
gender	Pearson Correlation	.165*	.024	.001	-.052	-.114	-.102	-.114	1
	Sig. (2-tailed)	.037	.767	.994	.489	.127	.172	.127	
	N	159	156	155	180	180	180	180	185

Predictor and Criterion Variables - Officers

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Birth_Yr	Pearson Correlation	-.049	.116	-.105	.278*	.333**	.309*	.376**	-.210
	Sig. (2-tailed)	.708	.384	.431	.027	.008	.014	.002	.085
	N	60	58	58	63	63	63	63	68
edulevel	Pearson Correlation	.039	.003	.016	.029	.186	.089	.129	.040
	Sig. (2-tailed)	.769	.982	.902	.820	.141	.482	.309	.745
	N	59	60	62	64	64	64	64	68
language	Pearson Correlation	.157	.322*	.063	.129	-.015	.041	.101	.057
	Sig. (2-tailed)	.291	.031	.679	.377	.921	.777	.491	.687
	N	47	45	45	49	49	49	49	53

Predictor and Criterion Variables - Officers

Correlations

		Birth_Yr	edulevel	language
leader	Pearson Correlation	.269	.077	.234
	Sig. (2-tailed)	.071	.619	.176
	N	46	44	35
insp	Pearson Correlation	.223	.102	.240
	Sig. (2-tailed)	.136	.509	.165
	N	46	44	35
support	Pearson Correlation	.178	.274	.291
	Sig. (2-tailed)	.236	.072	.089
	N	46	44	35
standard	Pearson Correlation	.156	.336*	-.235
	Sig. (2-tailed)	.302	.026	.174
	N	46	44	35
contextual	Pearson Correlation	.222	.234	.301
	Sig. (2-tailed)	.138	.126	.079
	N	46	44	35
task	Pearson Correlation	.263	.264	.010
	Sig. (2-tailed)	.078	.083	.952
	N	46	44	35
total	Pearson Correlation	.263	.266	.167
	Sig. (2-tailed)	.078	.082	.338
	N	46	44	35
N1 Nervous and Stressed Out	Pearson Correlation	.183	.055	.020
	Sig. (2-tailed)	.134	.656	.886
	N	68	69	53
N2 Worrying	Pearson Correlation	.281*	.102	.083
	Sig. (2-tailed)	.020	.403	.555
	N	68	69	53
N3 Irritable	Pearson Correlation	.211	.086	-.076
	Sig. (2-tailed)	.084	.482	.588
	N	68	69	53
N4 Envious and Jealous	Pearson Correlation	.197	-.063	-.118
	Sig. (2-tailed)	.108	.605	.400
	N	68	69	53

Predictor and Criterion Variables - Officers

Correlations

		Birth_Yr	edulevel	language
E1 Shy and Bashful	Pearson Correlation	.057	.082	-.243
	Sig. (2-tailed)	.645	.505	.079
	N	68	69	53
E2 Talkative	Pearson Correlation	.142	-.155	.310*
	Sig. (2-tailed)	.249	.203	.024
	N	68	69	53
E3 Socially Active	Pearson Correlation	.073	-.113	.088
	Sig. (2-tailed)	.554	.354	.532
	N	68	69	53
E4 Assertive	Pearson Correlation	.009	.143	-.050
	Sig. (2-tailed)	.941	.242	.722
	N	68	69	53
e5recode	Pearson Correlation	.142	.067	.008
	Sig. (2-tailed)	.249	.583	.955
	N	68	69	53
O1 Philosophical	Pearson Correlation	.028	.118	.197
	Sig. (2-tailed)	.824	.333	.157
	N	68	69	53
O2 Scientific Interest	Pearson Correlation	-.024	.010	.076
	Sig. (2-tailed)	.849	.936	.591
	N	68	69	53
O3 Creative	Pearson Correlation	-.069	.133	.181
	Sig. (2-tailed)	.576	.274	.196
	N	68	69	53
O4 Reflective	Pearson Correlation	-.040	.068	.042
	Sig. (2-tailed)	.743	.579	.765
	N	68	69	53
O5 Cultured	Pearson Correlation	-.149	.048	-.031
	Sig. (2-tailed)	.226	.693	.827
	N	68	69	53
A1 Friendly	Pearson Correlation	-.040	-.116	.139
	Sig. (2-tailed)	.748	.341	.319
	N	68	69	53

Predictor and Criterion Variables - Officers

Correlations

		Birth_Yr	edulevel	language
A2 Considerate	Pearson Correlation	.103	.043	.179
	Sig. (2-tailed)	.404	.724	.200
	N	68	69	53
A3 Cold and Insensitive	Pearson Correlation	.011	-.056	.385**
	Sig. (2-tailed)	.931	.648	.004
	N	68	69	53
A4 Helpful	Pearson Correlation	.098	-.035	.117
	Sig. (2-tailed)	.426	.774	.405
	N	68	69	53
A5 Warm and Sympathetic	Pearson Correlation	.079	-.041	.201
	Sig. (2-tailed)	.523	.737	.149
	N	68	69	53
C1 Efficient and Dependable	Pearson Correlation	-.247*	-.003	-.059
	Sig. (2-tailed)	.042	.982	.676
	N	68	69	53
C2 Hard Working	Pearson Correlation	.003	-.002	.179
	Sig. (2-tailed)	.983	.988	.199
	N	68	69	53
C3 Organized	Pearson Correlation	.061	.064	.116
	Sig. (2-tailed)	.622	.601	.407
	N	68	69	53
Scores for N_IPIP	Pearson Correlation	.061	.017	-.009
	Sig. (2-tailed)	.628	.889	.949
	N	66	68	52
Scores for E_IPIP	Pearson Correlation	.090	-.044	.252
	Sig. (2-tailed)	.475	.723	.071
	N	66	68	52
Scores for O_IPIP	Pearson Correlation	-.033	.114	.026
	Sig. (2-tailed)	.792	.357	.856
	N	66	68	52
Scores for A_IPIP	Pearson Correlation	.074	.016	.253
	Sig. (2-tailed)	.557	.899	.070
	N	66	68	52

Predictor and Criterion Variables - Officers

Correlations

		Birth_Yr	edulevel	language
Scores for C_IPIP	Pearson Correlation	-.029	.007	.208
	Sig. (2-tailed)	.818	.955	.140
	N	66	68	52
Scores for N_TSD	Pearson Correlation	.228	.039	.002
	Sig. (2-tailed)	.080	.764	.991
	N	60	62	47
Scores for E_TSD	Pearson Correlation	.009	-.081	.238
	Sig. (2-tailed)	.946	.542	.119
	N	57	59	44
Scores for O_TSD	Pearson Correlation	-.049	.039	.157
	Sig. (2-tailed)	.708	.769	.291
	N	60	59	47
Scores for A_TSD	Pearson Correlation	.116	.003	.322*
	Sig. (2-tailed)	.384	.982	.031
	N	58	60	45
Scores for C_TSD	Pearson Correlation	-.105	.016	.063
	Sig. (2-tailed)	.431	.902	.679
	N	58	62	45
vs_perc	Pearson Correlation	.278*	.029	.129
	Sig. (2-tailed)	.027	.820	.377
	N	63	64	49
sa_perc	Pearson Correlation	.333**	.186	-.015
	Sig. (2-tailed)	.008	.141	.921
	N	63	64	49
ps_perc	Pearson Correlation	.309*	.089	.041
	Sig. (2-tailed)	.014	.482	.777
	N	63	64	49
tot_perc	Pearson Correlation	.376**	.129	.101
	Sig. (2-tailed)	.002	.309	.491
	N	63	64	49
gender	Pearson Correlation	-.210	.040	.057
	Sig. (2-tailed)	.085	.745	.687
	N	68	68	53

Predictor and Criterion Variables - Officers

Correlations

		Birth_Yr	edulevel	language
Birth_Yr	Pearson Correlation	1	.381**	.090
	Sig. (2-tailed)		.007	.522
	N	68	49	53
edulevel	Pearson Correlation	.381**	1	-.039
	Sig. (2-tailed)	.007		.798
	N	49	69	46
language	Pearson Correlation	.090	-.039	1
	Sig. (2-tailed)	.522	.798	
	N	53	46	53

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Predictor and Criterion Variables - Non-officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
leader	Pearson Correlation	1	.599**	.710**	.719**	.726**	.921**	.873**	-.050
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.608
	N	108	108	108	108	108	108	108	108
insp	Pearson Correlation	.599**	1	.636**	.599**	.895**	.646**	.816**	-.006
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.952
	N	108	108	108	108	108	108	108	108
support	Pearson Correlation	.710**	.636**	1	.723**	.913**	.773**	.889**	-.098
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.315
	N	108	108	108	108	108	108	108	108
standard	Pearson Correlation	.719**	.599**	.723**	1	.734**	.933**	.880**	-.069
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.477
	N	108	108	108	108	108	108	108	108
contextual	Pearson Correlation	.726**	.895**	.913**	.734**	1	.787**	.945**	-.060
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.541
	N	108	108	108	108	108	108	108	108
task	Pearson Correlation	.921**	.646**	.773**	.933**	.787**	1	.945**	-.065
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.506
	N	108	108	108	108	108	108	108	108
total	Pearson Correlation	.873**	.816**	.889**	.880**	.945**	.945**	1	-.061
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.533
	N	108	108	108	108	108	108	108	108
N1 Nervous and Stressed Out	Pearson Correlation	-.050	-.006	-.098	-.069	-.060	-.065	-.061	1
	Sig. (2-tailed)	.608	.952	.315	.477	.541	.506	.533	
	N	108	108	108	108	108	108	108	118
N2 Worrying	Pearson Correlation	-.072	-.006	-.087	-.070	-.054	-.077	-.062	.858**
	Sig. (2-tailed)	.458	.954	.368	.472	.582	.431	.522	.000
	N	108	108	108	108	108	108	108	118
N3 Irritable	Pearson Correlation	.005	-.043	-.032	.004	-.041	.005	-.014	.592**
	Sig. (2-tailed)	.957	.658	.743	.971	.672	.962	.884	.000
	N	108	108	108	108	108	108	108	118
N4 Envious and Jealous	Pearson Correlation	.052	.042	-.018	.061	.011	.061	.043	.613**
	Sig. (2-tailed)	.590	.669	.849	.532	.908	.529	.657	.000
	N	108	108	108	108	108	108	108	118

Predictor and Criterion Variables - Non-officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
E1 Shy and Bashful	Pearson Correlation	-.155	-.109	-.125	-.090	-.130	-.131	-.139	.559**
	Sig. (2-tailed)	.108	.262	.197	.353	.181	.176	.151	.000
	N	108	108	108	108	108	108	108	118
E2 Talkative	Pearson Correlation	.157	.095	.140	.196*	.131	.191*	.168	-.321**
	Sig. (2-tailed)	.104	.330	.149	.042	.178	.047	.083	.000
	N	108	108	108	108	108	108	108	118
E3 Socially Active	Pearson Correlation	-.030	.058	.063	.012	.067	-.009	.028	-.417**
	Sig. (2-tailed)	.761	.553	.520	.905	.493	.928	.771	.000
	N	108	108	108	108	108	108	108	118
E4 Assertive	Pearson Correlation	-.107	.029	-.195*	-.072	-.098	-.096	-.101	-.236**
	Sig. (2-tailed)	.272	.767	.043	.461	.315	.326	.298	.010
	N	108	108	108	108	108	108	108	118
E5 Unsociable	Pearson Correlation	-.234*	-.213*	-.222*	-.237*	-.240*	-.254**	-.264**	.487**
	Sig. (2-tailed)	.015	.027	.021	.014	.012	.008	.006	.000
	N	108	108	108	108	108	108	108	118
O1 Philosophical	Pearson Correlation	-.039	.052	-.139	-.016	-.052	-.029	-.048	-.127
	Sig. (2-tailed)	.686	.590	.153	.873	.589	.765	.621	.170
	N	108	108	108	108	108	108	108	118
O2 Scientific Interest	Pearson Correlation	.044	.087	-.051	.030	.016	.040	.025	-.084
	Sig. (2-tailed)	.651	.370	.599	.756	.867	.683	.800	.366
	N	108	108	108	108	108	108	108	118
O3 Creative	Pearson Correlation	-.013	.056	.012	.011	.037	.000	.017	-.295**
	Sig. (2-tailed)	.897	.562	.898	.907	.704	.999	.863	.001
	N	108	108	108	108	108	108	108	118
O4 Reflective	Pearson Correlation	-.044	.063	-.044	-.002	.008	-.024	-.016	-.019
	Sig. (2-tailed)	.653	.514	.653	.982	.934	.806	.871	.839
	N	108	108	108	108	108	108	108	118
O5 Cultured	Pearson Correlation	-.069	.068	-.142	-.109	-.046	-.097	-.080	-.027
	Sig. (2-tailed)	.475	.486	.144	.263	.635	.319	.409	.772
	N	108	108	108	108	108	108	108	118
A1 Friendly	Pearson Correlation	.070	.152	.142	.162	.162	.127	.150	-.393**
	Sig. (2-tailed)	.474	.117	.141	.094	.093	.191	.122	.000
	N	108	108	108	108	108	108	108	118

Predictor and Criterion Variables - Non-officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
A2 Considerate	Pearson Correlation	.021	.095	.104	.087	.110	.060	.085	-.132
	Sig. (2-tailed)	.833	.330	.283	.369	.256	.540	.380	.154
	N	108	108	108	108	108	108	108	118
A3 Cold and Insensitive	Pearson Correlation	.154	.037	.179	.137	.123	.156	.143	-.311**
	Sig. (2-tailed)	.113	.704	.064	.159	.205	.107	.140	.001
	N	108	108	108	108	108	108	108	118
A4 Helpful	Pearson Correlation	.102	.080	.156	.093	.132	.105	.121	-.194*
	Sig. (2-tailed)	.292	.411	.106	.337	.172	.278	.211	.035
	N	108	108	108	108	108	108	108	118
A5 Warm and Sympathetic	Pearson Correlation	.145	.102	.142	.142	.136	.155	.148	-.177
	Sig. (2-tailed)	.135	.292	.144	.142	.161	.110	.125	.055
	N	108	108	108	108	108	108	108	118
C1 Efficient and Dependable	Pearson Correlation	.146	.098	.090	.215*	.104	.196*	.155	-.453**
	Sig. (2-tailed)	.131	.315	.354	.025	.286	.042	.108	.000
	N	108	108	108	108	108	108	108	118
C2 Hard Working	Pearson Correlation	.077	.151	.117	.105	.147	.099	.129	-.395**
	Sig. (2-tailed)	.428	.119	.230	.278	.129	.308	.183	.000
	N	108	108	108	108	108	108	108	118
C3 Organized	Pearson Correlation	.128	.177	.149	.183	.179	.168	.181	-.288**
	Sig. (2-tailed)	.194	.067	.124	.058	.063	.083	.061	.002
	N	108	108	108	108	108	108	108	118
Scores for N_IPIP	Pearson Correlation	-.136	-.004	-.128	-.121	-.077	-.139	-.108	.787**
	Sig. (2-tailed)	.166	.969	.194	.217	.435	.158	.272	.000
	N	105	105	105	105	105	105	105	113
Scores for E_IPIP	Pearson Correlation	.122	.079	.155	.100	.132	.120	.132	-.491**
	Sig. (2-tailed)	.214	.424	.116	.309	.180	.225	.180	.000
	N	105	105	105	105	105	105	105	113
Scores for O_IPIP	Pearson Correlation	.021	.044	-.058	.067	-.011	.049	.016	-.299**
	Sig. (2-tailed)	.833	.657	.558	.495	.911	.623	.871	.001
	N	105	105	105	105	105	105	105	113
Scores for A_IPIP	Pearson Correlation	.152	.031	.131	.082	.093	.125	.113	-.222*
	Sig. (2-tailed)	.121	.754	.182	.405	.344	.204	.251	.018
	N	105	105	105	105	105	105	105	113

Predictor and Criterion Variables - Non-officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Scores for C_IPIP	Pearson Correlation	.128	-.009	.104	.150	.057	.150	.108	-.504**
	Sig. (2-tailed)	.195	.929	.289	.127	.566	.126	.271	.000
	N	105	105	105	105	105	105	105	113
Scores for N_TSD	Pearson Correlation	-.021	-.035	-.080	-.034	-.065	-.030	-.042	.940**
	Sig. (2-tailed)	.840	.735	.443	.746	.534	.777	.687	.000
	N	94	94	94	94	94	94	94	103
Scores for E_TSD	Pearson Correlation	.125	.154	.108	.096	.142	.118	.138	-.501**
	Sig. (2-tailed)	.220	.129	.288	.349	.162	.246	.176	.000
	N	98	98	98	98	98	98	98	108
Scores for O_TSD	Pearson Correlation	-.043	.034	-.088	.009	-.033	-.018	-.033	-.096
	Sig. (2-tailed)	.669	.734	.379	.932	.747	.862	.743	.318
	N	101	101	101	101	101	101	101	110
Scores for A_TSD	Pearson Correlation	.130	.075	.120	.135	.108	.142	.126	-.333**
	Sig. (2-tailed)	.211	.473	.250	.196	.300	.172	.225	.001
	N	94	94	94	94	94	94	94	104
Scores for C_TSD	Pearson Correlation	.116	.117	.087	.178	.113	.159	.141	-.417**
	Sig. (2-tailed)	.252	.251	.391	.078	.267	.115	.164	.000
	N	99	99	99	99	99	99	99	108
vs_perc	Pearson Correlation	.192	.210	.168	.168	.204	.194	.214	-.089
	Sig. (2-tailed)	.393	.348	.455	.455	.361	.387	.338	.687
	N	22	22	22	22	22	22	22	23
sa_perc	Pearson Correlation	-.028	.198	-.204	.061	-.027	.021	-.002	-.152
	Sig. (2-tailed)	.901	.377	.363	.788	.903	.927	.993	.489
	N	22	22	22	22	22	22	22	23
ps_perc	Pearson Correlation	.064	.197	.041	-.018	.121	.022	.074	-.218
	Sig. (2-tailed)	.777	.380	.856	.935	.592	.923	.744	.317
	N	22	22	22	22	22	22	22	23
tot_perc	Pearson Correlation	.131	.248	.048	.085	.150	.115	.142	-.155
	Sig. (2-tailed)	.562	.266	.831	.707	.505	.609	.529	.479
	N	22	22	22	22	22	22	22	23
gender	Pearson Correlation	-.151	.086	-.174	-.190	-.054	-.185	-.129	.067
	Sig. (2-tailed)	.131	.392	.082	.056	.591	.063	.198	.488
	N	101	101	101	101	101	101	101	110

Predictor and Criterion Variables - Non-officers

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Birth_Yr	Pearson Correlation	.134	-.015	.093	.063	.046	.105	.075	-.076
	Sig. (2-tailed)	.183	.886	.357	.530	.650	.298	.455	.430
	N	100	100	100	100	100	100	100	109
edulevel	Pearson Correlation	.418	-.071	-.051	.361	-.071	.415	.195	-.003
	Sig. (2-tailed)	.176	.826	.875	.248	.826	.180	.545	.994
	N	12	12	12	12	12	12	12	12
language	Pearson Correlation	.214	-.194	-.119	-.173	-.187	.008	-.106	-.013
	Sig. (2-tailed)	.314	.364	.581	.418	.381	.972	.622	.952
	N	24	24	24	24	24	24	24	26

Predictor and Criterion Variables - Non-officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
leader	Pearson Correlation	-.072	.005	.052	-.155	.157	-.030	-.107
	Sig. (2-tailed)	.458	.957	.590	.108	.104	.761	.272
	N	108	108	108	108	108	108	108
insp	Pearson Correlation	-.006	-.043	.042	-.109	.095	.058	.029
	Sig. (2-tailed)	.954	.658	.669	.262	.330	.553	.767
	N	108	108	108	108	108	108	108
support	Pearson Correlation	-.087	-.032	-.018	-.125	.140	.063	-.195*
	Sig. (2-tailed)	.368	.743	.849	.197	.149	.520	.043
	N	108	108	108	108	108	108	108
standard	Pearson Correlation	-.070	.004	.061	-.090	.196*	.012	-.072
	Sig. (2-tailed)	.472	.971	.532	.353	.042	.905	.461
	N	108	108	108	108	108	108	108
contextual	Pearson Correlation	-.054	-.041	.011	-.130	.131	.067	-.098
	Sig. (2-tailed)	.582	.672	.908	.181	.178	.493	.315
	N	108	108	108	108	108	108	108
task	Pearson Correlation	-.077	.005	.061	-.131	.191*	-.009	-.096
	Sig. (2-tailed)	.431	.962	.529	.176	.047	.928	.326
	N	108	108	108	108	108	108	108
total	Pearson Correlation	-.062	-.014	.043	-.139	.168	.028	-.101
	Sig. (2-tailed)	.522	.884	.657	.151	.083	.771	.298
	N	108	108	108	108	108	108	108
N1 Nervous and Stressed Out	Pearson Correlation	.858**	.592**	.613**	.559**	-.321**	-.417**	-.236**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.010
	N	118	118	118	118	118	118	118
N2 Worrying	Pearson Correlation	1	.585**	.631**	.632**	-.371**	-.400**	-.176
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.057
	N	118	118	118	118	118	118	118
N3 Irritable	Pearson Correlation	.585**	1	.545**	.276**	-.078	-.264**	-.058
	Sig. (2-tailed)	.000		.000	.002	.399	.004	.536
	N	118	118	118	118	118	118	118
N4 Envious and Jealous	Pearson Correlation	.631**	.545**	1	.431**	-.222*	-.372**	-.172
	Sig. (2-tailed)	.000	.000		.000	.016	.000	.063
	N	118	118	118	118	118	118	118

Predictor and Criterion Variables - Non-officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
E1 Shy and Bashful	Pearson Correlation	.632**	.276**	.431**	1	-.675**	-.571**	-.194*
	Sig. (2-tailed)	.000	.002	.000		.000	.000	.035
	N	118	118	118	118	118	118	118
E2 Talkative	Pearson Correlation	-.371**	-.078	-.222*	-.675**	1	.571**	.213*
	Sig. (2-tailed)	.000	.399	.016	.000		.000	.020
	N	118	118	118	118	118	118	118
E3 Socially Active	Pearson Correlation	-.400**	-.264**	-.372**	-.571**	.571**	1	.209*
	Sig. (2-tailed)	.000	.004	.000	.000	.000		.023
	N	118	118	118	118	118	118	118
E4 Assertive	Pearson Correlation	-.176	-.058	-.172	-.194*	.213*	.209*	1
	Sig. (2-tailed)	.057	.536	.063	.035	.020	.023	
	N	118	118	118	118	118	118	118
E5 Unsociable	Pearson Correlation	.539**	.263**	.404**	.803**	-.672**	-.645**	-.279**
	Sig. (2-tailed)	.000	.004	.000	.000	.000	.000	.002
	N	118	118	118	118	118	118	118
O1 Philosophical	Pearson Correlation	-.084	-.050	-.171	-.017	.091	.065	.469**
	Sig. (2-tailed)	.367	.590	.064	.854	.326	.487	.000
	N	118	118	118	118	118	118	118
O2 Scientific Interest	Pearson Correlation	-.035	-.004	-.065	.053	.041	.157	.310**
	Sig. (2-tailed)	.705	.968	.482	.571	.660	.089	.001
	N	118	118	118	118	118	118	118
O3 Creative	Pearson Correlation	-.287**	-.248**	-.419**	-.241**	.164	.273**	.298**
	Sig. (2-tailed)	.002	.007	.000	.009	.075	.003	.001
	N	118	118	118	118	118	118	118
O4 Reflective	Pearson Correlation	.020	-.064	-.046	.113	.072	.071	.309**
	Sig. (2-tailed)	.831	.490	.619	.223	.441	.444	.001
	N	118	118	118	118	118	118	118
O5 Cultured	Pearson Correlation	-.050	-.037	-.074	.022	.050	-.004	.276**
	Sig. (2-tailed)	.591	.691	.424	.815	.590	.967	.002
	N	118	118	118	118	118	118	118
A1 Friendly	Pearson Correlation	-.367**	-.348**	-.322**	-.393**	.520**	.608**	.104
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.263
	N	118	118	118	118	118	118	118

Predictor and Criterion Variables - Non-officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
A2 Considerate	Pearson Correlation	-.094	-.279**	-.320**	.018	.109	.271**	.048
	Sig. (2-tailed)	.312	.002	.000	.848	.240	.003	.806
	N	118	118	118	118	118	118	118
A3 Cold and Insensitive	Pearson Correlation	-.360**	-.456**	-.448**	-.284**	.267**	.307**	-.001
	Sig. (2-tailed)	.000	.000	.000	.002	.003	.001	.993
	N	118	118	118	118	118	118	118
A4 Helpful	Pearson Correlation	-.198*	-.204*	-.252**	-.228*	.398**	.255**	.031
	Sig. (2-tailed)	.032	.027	.006	.013	.000	.005	.737
	N	118	118	118	118	118	118	118
A5 Warm and Sympathetic	Pearson Correlation	-.236*	-.192*	-.320**	-.246**	.392**	.346**	.230*
	Sig. (2-tailed)	.010	.037	.000	.007	.000	.000	.012
	N	118	118	118	118	118	118	118
C1 Efficient and Dependable	Pearson Correlation	-.461**	-.275**	-.474**	-.424**	.389**	.325**	.391**
	Sig. (2-tailed)	.000	.003	.000	.000	.000	.000	.000
	N	118	118	118	118	118	118	118
C2 Hard Working	Pearson Correlation	-.311**	-.162	-.430**	-.326**	.368**	.433**	.266**
	Sig. (2-tailed)	.001	.080	.000	.000	.000	.000	.004
	N	118	118	118	118	118	118	118
C3 Organized	Pearson Correlation	-.255**	-.142	-.343**	-.306**	.281**	.399**	.192*
	Sig. (2-tailed)	.005	.124	.000	.001	.002	.000	.037
	N	118	118	118	118	118	118	118
Scores for N_IPIP	Pearson Correlation	.800**	.678**	.587**	.490**	-.332**	-.377**	-.166
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.078
	N	113	113	113	113	113	113	113
Scores for E_IPIP	Pearson Correlation	-.511**	-.174	-.358**	-.818**	.746**	.729**	.319**
	Sig. (2-tailed)	.000	.066	.000	.000	.000	.000	.001
	N	113	113	113	113	113	113	113
Scores for O_IPIP	Pearson Correlation	-.297**	-.128	-.249**	-.290**	.326**	.223*	.408**
	Sig. (2-tailed)	.001	.178	.008	.002	.000	.017	.000
	N	113	113	113	113	113	113	113
Scores for A_IPIP	Pearson Correlation	-.259**	-.233*	-.277**	-.312**	.425**	.407**	.134
	Sig. (2-tailed)	.006	.013	.003	.001	.000	.000	.157
	N	113	113	113	113	113	113	113

Predictor and Criterion Variables - Non-officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Scores for C_IPIP	Pearson Correlation	-.422**	-.237*	-.393**	-.373**	.319**	.366**	.209*
	Sig. (2-tailed)	.000	.012	.000	.000	.001	.000	.026
	N	113	113	113	113	113	113	113
Scores for N_TSD	Pearson Correlation	.923**	.799**	.748**	.526**	-.303**	-.426**	-.192
	Sig. (2-tailed)	.000	.000	.000	.000	.002	.000	.053
	N	103	103	103	103	103	103	103
Scores for E_TSD	Pearson Correlation	-.587**	-.331**	-.464**	-.939**	.808**	.766**	.305**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001
	N	108	108	108	108	108	108	108
Scores for O_TSD	Pearson Correlation	-.037	-.043	-.138	.019	.107	.085	.512**
	Sig. (2-tailed)	.704	.654	.151	.845	.265	.376	.000
	N	110	110	110	110	110	110	110
Scores for A_TSD	Pearson Correlation	-.396**	-.405**	-.502**	-.318**	.449**	.468**	.149
	Sig. (2-tailed)	.000	.000	.000	.001	.000	.000	.130
	N	104	104	104	104	104	104	104
Scores for C_TSD	Pearson Correlation	-.371**	-.221*	-.478**	-.401**	.410**	.392**	.379**
	Sig. (2-tailed)	.000	.021	.000	.000	.000	.000	.000
	N	108	108	108	108	108	108	108
vs_perc	Pearson Correlation	-.106	.297	.064	.103	-.106	.063	.072
	Sig. (2-tailed)	.629	.169	.773	.641	.632	.776	.745
	N	23	23	23	23	23	23	23
sa_perc	Pearson Correlation	-.237	.007	-.222	.049	.009	.100	.131
	Sig. (2-tailed)	.277	.975	.308	.825	.968	.651	.551
	N	23	23	23	23	23	23	23
ps_perc	Pearson Correlation	-.068	.155	-.087	-.021	.184	.213	.168
	Sig. (2-tailed)	.759	.480	.694	.923	.401	.330	.444
	N	23	23	23	23	23	23	23
tot_perc	Pearson Correlation	-.135	.204	-.063	.043	.107	.175	.167
	Sig. (2-tailed)	.539	.350	.775	.846	.628	.424	.446
	N	23	23	23	23	23	23	23
gender	Pearson Correlation	.128	-.049	.118	.122	-.115	-.103	.034
	Sig. (2-tailed)	.181	.609	.220	.204	.232	.285	.726
	N	110	110	110	110	110	110	110

Predictor and Criterion Variables - Non-officers

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Birth_Yr	Pearson Correlation	-.143	-.034	-.057	-.021	.082	-.022	-.118
	Sig. (2-tailed)	.137	.729	.553	.828	.399	.821	.223
	N	109	109	109	109	109	109	109
edulevel	Pearson Correlation	.204	.234	.073	-.018	.203	.008	.298
	Sig. (2-tailed)	.525	.463	.823	.956	.526	.981	.347
	N	12	12	12	12	12	12	12
language	Pearson Correlation	.049	.208	.063	-.048	.056	-.086	-.221
	Sig. (2-tailed)	.811	.308	.762	.817	.786	.677	.277
	N	26	26	26	26	26	26	26

Predictor and Criterion Variables - Non-officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
leader	Pearson Correlation	-.234*	-.039	.044	-.013	-.044	-.069	.070
	Sig. (2-tailed)	.015	.686	.651	.897	.653	.475	.474
	N	108	108	108	108	108	108	108
insp	Pearson Correlation	-.213*	.052	.087	.056	.063	.068	.152
	Sig. (2-tailed)	.027	.590	.370	.562	.514	.486	.117
	N	108	108	108	108	108	108	108
support	Pearson Correlation	-.222*	-.139	-.051	.012	-.044	-.142	.142
	Sig. (2-tailed)	.021	.153	.599	.898	.653	.144	.141
	N	108	108	108	108	108	108	108
standard	Pearson Correlation	-.237*	-.016	.030	.011	-.002	-.109	.162
	Sig. (2-tailed)	.014	.873	.756	.907	.982	.263	.094
	N	108	108	108	108	108	108	108
contextual	Pearson Correlation	-.240*	-.052	.016	.037	.008	-.046	.162
	Sig. (2-tailed)	.012	.589	.867	.704	.934	.635	.093
	N	108	108	108	108	108	108	108
task	Pearson Correlation	-.254**	-.029	.040	.000	-.024	-.097	.127
	Sig. (2-tailed)	.008	.765	.683	.999	.806	.319	.191
	N	108	108	108	108	108	108	108
total	Pearson Correlation	-.264**	-.048	.025	.017	-.016	-.080	.150
	Sig. (2-tailed)	.006	.621	.800	.863	.871	.409	.122
	N	108	108	108	108	108	108	108
N1 Nervous and Stressed Out	Pearson Correlation	.487**	-.127	-.084	-.295**	-.019	-.027	-.393**
	Sig. (2-tailed)	.000	.170	.366	.001	.839	.772	.000
	N	118	118	118	118	118	118	118
N2 Worrying	Pearson Correlation	.539**	-.084	-.035	-.287**	.020	-.050	-.367**
	Sig. (2-tailed)	.000	.367	.705	.002	.831	.591	.000
	N	118	118	118	118	118	118	118
N3 Irritable	Pearson Correlation	.263**	-.050	-.004	-.248**	-.064	-.037	-.348**
	Sig. (2-tailed)	.004	.590	.968	.007	.490	.691	.000
	N	118	118	118	118	118	118	118
N4 Envious and Jealous	Pearson Correlation	.404**	-.171	-.065	-.419**	-.046	-.074	-.322**
	Sig. (2-tailed)	.000	.064	.482	.000	.619	.424	.000
	N	118	118	118	118	118	118	118

Predictor and Criterion Variables - Non-officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
E1 Shy and Bashful	Pearson Correlation	.803**	-.017	.053	-.241**	.113	.022	-.393**
	Sig. (2-tailed)	.000	.854	.571	.009	.223	.815	.000
	N	118	118	118	118	118	118	118
E2 Talkative	Pearson Correlation	-.672**	.091	.041	.164	.072	.050	.520**
	Sig. (2-tailed)	.000	.326	.660	.075	.441	.590	.000
	N	118	118	118	118	118	118	118
E3 Socially Active	Pearson Correlation	-.645**	.065	.157	.273**	.071	-.004	.608**
	Sig. (2-tailed)	.000	.487	.089	.003	.444	.967	.000
	N	118	118	118	118	118	118	118
E4 Assertive	Pearson Correlation	-.279**	.469**	.310**	.298**	.309**	.276**	.104
	Sig. (2-tailed)	.002	.000	.001	.001	.001	.002	.263
	N	118	118	118	118	118	118	118
E5 Unsociable	Pearson Correlation	1	-.001	.064	-.219*	.097	.083	-.493**
	Sig. (2-tailed)		.991	.489	.017	.297	.373	.000
	N	118	118	118	118	118	118	118
O1 Philosophical	Pearson Correlation	-.001	1	.629**	.374**	.705**	.524**	.071
	Sig. (2-tailed)	.991		.000	.000	.000	.000	.445
	N	118	118	118	118	118	118	118
O2 Scientific Interest	Pearson Correlation	.064	.629**	1	.334**	.475**	.489**	.048
	Sig. (2-tailed)	.489	.000		.000	.000	.000	.609
	N	118	118	118	118	118	118	118
O3 Creative	Pearson Correlation	-.219*	.374**	.334**	1	.311**	.321**	.226*
	Sig. (2-tailed)	.017	.000	.000		.001	.000	.014
	N	118	118	118	118	118	118	118
O4 Reflective	Pearson Correlation	.097	.705**	.475**	.311**	1	.505**	.034
	Sig. (2-tailed)	.297	.000	.000	.001		.000	.713
	N	118	118	118	118	118	118	118
O5 Cultured	Pearson Correlation	.083	.524**	.489**	.321**	.505**	1	-.061
	Sig. (2-tailed)	.373	.000	.000	.000	.000		.509
	N	118	118	118	118	118	118	118
A1 Friendly	Pearson Correlation	-.493**	.071	.048	.226*	.034	-.061	1
	Sig. (2-tailed)	.000	.445	.609	.014	.713	.509	
	N	118	118	118	118	118	118	118

Predictor and Criterion Variables - Non-officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
A2 Considerate	Pearson Correlation	-.083	.195*	.142	.196*	.200*	.082	.494**
	Sig. (2-tailed)	.374	.034	.126	.034	.029	.375	.000
	N	118	118	118	118	118	118	118
A3 Cold and Insensitive	Pearson Correlation	-.345**	-.078	-.178	.131	-.021	-.146	.368**
	Sig. (2-tailed)	.000	.400	.054	.157	.822	.115	.000
	N	118	118	118	118	118	118	118
A4 Helpful	Pearson Correlation	-.276**	.086	.051	.136	.091	.164	.353**
	Sig. (2-tailed)	.003	.355	.581	.141	.329	.075	.000
	N	118	118	118	118	118	118	118
A5 Warm and Sympathetic	Pearson Correlation	-.398**	.205*	.046	.280**	.272**	.138	.419**
	Sig. (2-tailed)	.000	.026	.618	.002	.003	.136	.000
	N	118	118	118	118	118	118	118
C1 Efficient and Dependable	Pearson Correlation	-.482**	.265**	.144	.370**	.205*	.075	.321**
	Sig. (2-tailed)	.000	.004	.121	.000	.026	.418	.000
	N	118	118	118	118	118	118	118
C2 Hard Working	Pearson Correlation	-.350**	.130	.105	.242**	.055	.168	.418**
	Sig. (2-tailed)	.000	.161	.256	.008	.554	.069	.000
	N	118	118	118	118	118	118	118
C3 Organized	Pearson Correlation	-.390**	.141	.121	.346**	.107	.055	.342**
	Sig. (2-tailed)	.000	.128	.191	.000	.247	.554	.000
	N	118	118	118	118	118	118	118
Scores for N_IPIP	Pearson Correlation	.425**	-.126	-.143	-.303**	-.019	-.031	-.422**
	Sig. (2-tailed)	.000	.185	.130	.001	.841	.746	.000
	N	113	113	113	113	113	113	113
Scores for E_IPIP	Pearson Correlation	-.772**	.100	.142	.293**	.036	.069	.509**
	Sig. (2-tailed)	.000	.293	.132	.002	.707	.465	.000
	N	113	113	113	113	113	113	113
Scores for O_IPIP	Pearson Correlation	-.227*	.656**	.527**	.540**	.525**	.419**	.104
	Sig. (2-tailed)	.015	.000	.000	.000	.000	.000	.273
	N	113	113	113	113	113	113	113
Scores for A_IPIP	Pearson Correlation	-.382**	.049	.004	.134	.076	.081	.471**
	Sig. (2-tailed)	.000	.603	.965	.156	.426	.396	.000
	N	113	113	113	113	113	113	113

Predictor and Criterion Variables - Non-officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Scores for C_IPIP	Pearson Correlation	-.362**	.123	.076	.237*	.048	.014	.338**
	Sig. (2-tailed)	.000	.193	.426	.012	.612	.883	.000
	N	113	113	113	113	113	113	113
Scores for N_TSD	Pearson Correlation	.481**	-.117	-.041	-.357**	-.041	-.068	-.459**
	Sig. (2-tailed)	.000	.238	.678	.000	.683	.494	.000
	N	103	103	103	103	103	103	103
Scores for E_TSD	Pearson Correlation	-.898**	.027	-.004	.272**	-.046	-.007	.565**
	Sig. (2-tailed)	.000	.785	.967	.004	.636	.945	.000
	N	108	108	108	108	108	108	108
Scores for O_TSD	Pearson Correlation	.041	.909**	.791**	.529**	.797**	.688**	.046
	Sig. (2-tailed)	.671	.000	.000	.000	.000	.000	.636
	N	110	110	110	110	110	110	110
Scores for A_TSD	Pearson Correlation	-.458**	.172	.046	.318**	.208*	.091	.679**
	Sig. (2-tailed)	.000	.081	.640	.001	.034	.356	.000
	N	104	104	104	104	104	104	104
Scores for C_TSD	Pearson Correlation	-.455**	.210*	.139	.349**	.159	.088	.379**
	Sig. (2-tailed)	.000	.029	.153	.000	.100	.364	.000
	N	108	108	108	108	108	108	108
vs_perc	Pearson Correlation	-.049	.280	.379	-.153	.147	.310	-.172
	Sig. (2-tailed)	.825	.196	.074	.485	.503	.150	.431
	N	23	23	23	23	23	23	23
sa_perc	Pearson Correlation	-.081	.149	.119	.253	.085	.268	.222
	Sig. (2-tailed)	.713	.497	.587	.243	.701	.217	.309
	N	23	23	23	23	23	23	23
ps_perc	Pearson Correlation	-.062	.116	.353	.115	.281	.196	-.025
	Sig. (2-tailed)	.778	.599	.099	.600	.194	.369	.909
	N	23	23	23	23	23	23	23
tot_perc	Pearson Correlation	-.081	.200	.357	.094	.279	.305	-.018
	Sig. (2-tailed)	.714	.360	.095	.668	.197	.157	.933
	N	23	23	23	23	23	23	23
gender	Pearson Correlation	.116	-.013	-.013	-.049	-.036	.066	-.057
	Sig. (2-tailed)	.227	.893	.890	.613	.708	.495	.552
	N	110	110	110	110	110	110	110

Predictor and Criterion Variables - Non-officers

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Birth_Yr	Pearson Correlation	.000	.047	.044	.065	-.011	-.092	-.005
	Sig. (2-tailed)	.997	.627	.653	.500	.913	.339	.960
	N	109	109	109	109	109	109	109
edulevel	Pearson Correlation	-.171	.055	.228	-.153	.127	.190	-.369
	Sig. (2-tailed)	.595	.864	.476	.635	.694	.555	.238
	N	12	12	12	12	12	12	12
language	Pearson Correlation	.112	-.036	.116	.044	-.171	.048	-.122
	Sig. (2-tailed)	.585	.860	.573	.831	.403	.815	.552
	N	26	26	26	26	26	26	26

Predictor and Criterion Variables - Non-officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
leader	Pearson Correlation	.021	.154	.102	.145	.146	.077	.126
	Sig. (2-tailed)	.833	.113	.292	.135	.131	.428	.194
	N	108	108	108	108	108	108	108
insp	Pearson Correlation	.095	.037	.080	.102	.098	.151	.177
	Sig. (2-tailed)	.330	.704	.411	.292	.315	.119	.067
	N	108	108	108	108	108	108	108
support	Pearson Correlation	.104	.179	.156	.142	.090	.117	.149
	Sig. (2-tailed)	.283	.064	.106	.144	.354	.230	.124
	N	108	108	108	108	108	108	108
standard	Pearson Correlation	.087	.137	.093	.142	.215*	.105	.183
	Sig. (2-tailed)	.369	.159	.337	.142	.025	.278	.058
	N	108	108	108	108	108	108	108
contextual	Pearson Correlation	.110	.123	.132	.136	.104	.147	.179
	Sig. (2-tailed)	.256	.205	.172	.161	.286	.129	.063
	N	108	108	108	108	108	108	108
task	Pearson Correlation	.060	.156	.105	.155	.196*	.099	.168
	Sig. (2-tailed)	.540	.107	.278	.110	.042	.308	.083
	N	108	108	108	108	108	108	108
total	Pearson Correlation	.085	.143	.121	.148	.155	.129	.181
	Sig. (2-tailed)	.380	.140	.211	.125	.108	.183	.061
	N	108	108	108	108	108	108	108
N1 Nervous and Stressed Out	Pearson Correlation	-.132	-.311**	-.194*	-.177	-.453**	-.395**	-.288**
	Sig. (2-tailed)	.154	.001	.035	.055	.000	.000	.002
	N	118	118	118	118	118	118	118
N2 Worrying	Pearson Correlation	-.094	-.360**	-.198*	-.236*	-.461**	-.311**	-.255**
	Sig. (2-tailed)	.312	.000	.032	.010	.000	.001	.005
	N	118	118	118	118	118	118	118
N3 Irritable	Pearson Correlation	-.279**	-.456**	-.204*	-.192*	-.275**	-.162	-.142
	Sig. (2-tailed)	.002	.000	.027	.037	.003	.080	.124
	N	118	118	118	118	118	118	118
N4 Envious and Jealous	Pearson Correlation	-.320**	-.448**	-.252**	-.320**	-.474**	-.430**	-.343**
	Sig. (2-tailed)	.000	.000	.006	.000	.000	.000	.000
	N	118	118	118	118	118	118	118

Predictor and Criterion Variables - Non-officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
E1 Shy and Bashful	Pearson Correlation	.018	-.284**	-.228*	-.246**	-.424**	-.326**	-.306**
	Sig. (2-tailed)	.848	.002	.013	.007	.000	.000	.001
	N	118	118	118	118	118	118	118
E2 Talkative	Pearson Correlation	.109	.267**	.398**	.392**	.389**	.368**	.281**
	Sig. (2-tailed)	.240	.003	.000	.000	.000	.000	.002
	N	118	118	118	118	118	118	118
E3 Socially Active	Pearson Correlation	.271**	.307**	.255**	.346**	.325**	.433**	.399**
	Sig. (2-tailed)	.003	.001	.005	.000	.000	.000	.000
	N	118	118	118	118	118	118	118
E4 Assertive	Pearson Correlation	.048	-.001	.031	.230*	.391**	.266**	.192*
	Sig. (2-tailed)	.606	.993	.737	.012	.000	.004	.037
	N	118	118	118	118	118	118	118
E5 Unsociable	Pearson Correlation	-.083	-.345**	-.276**	-.398**	-.482**	-.350**	-.390**
	Sig. (2-tailed)	.374	.000	.003	.000	.000	.000	.000
	N	118	118	118	118	118	118	118
O1 Philosophical	Pearson Correlation	.195*	-.078	.086	.205*	.265**	.130	.141
	Sig. (2-tailed)	.034	.400	.355	.026	.004	.161	.128
	N	118	118	118	118	118	118	118
O2 Scientific Interest	Pearson Correlation	.142	-.178	.051	.046	.144	.105	.121
	Sig. (2-tailed)	.126	.054	.581	.618	.121	.256	.191
	N	118	118	118	118	118	118	118
O3 Creative	Pearson Correlation	.196*	.131	.136	.280**	.370**	.242**	.346**
	Sig. (2-tailed)	.034	.157	.141	.002	.000	.008	.000
	N	118	118	118	118	118	118	118
O4 Reflective	Pearson Correlation	.200*	-.021	.091	.272**	.205*	.055	.107
	Sig. (2-tailed)	.029	.822	.329	.003	.026	.554	.247
	N	118	118	118	118	118	118	118
O5 Cultured	Pearson Correlation	.082	-.146	.164	.138	.075	.168	.055
	Sig. (2-tailed)	.375	.115	.075	.136	.418	.069	.554
	N	118	118	118	118	118	118	118
A1 Friendly	Pearson Correlation	.494**	.368**	.353**	.419**	.321**	.418**	.342**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	118	118	118	118	118	118	118

Predictor and Criterion Variables - Non-officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
A2 Considerate	Pearson Correlation	1	.451**	.460**	.486**	.138	.394**	.221*
	Sig. (2-tailed)		.000	.000	.000	.137	.000	.016
	N	118	118	118	118	118	118	118
A3 Cold and Insensitive	Pearson Correlation	.451**	1	.365**	.576**	.331**	.213*	.235*
	Sig. (2-tailed)	.000		.000	.000	.000	.020	.010
	N	118	118	118	118	118	118	118
A4 Helpful	Pearson Correlation	.460**	.365**	1	.563**	.303**	.380**	.265**
	Sig. (2-tailed)	.000	.000		.000	.001	.000	.004
	N	118	118	118	118	118	118	118
A5 Warm and Sympathetic	Pearson Correlation	.486**	.576**	.563**	1	.572**	.344**	.403**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	118	118	118	118	118	118	118
C1 Efficient and Dependable	Pearson Correlation	.138	.331**	.303**	.572**	1	.521**	.636**
	Sig. (2-tailed)	.137	.000	.001	.000		.000	.000
	N	118	118	118	118	118	118	118
C2 Hard Working	Pearson Correlation	.394**	.213*	.380**	.344**	.521**	1	.652**
	Sig. (2-tailed)	.000	.020	.000	.000	.000		.000
	N	118	118	118	118	118	118	118
C3 Organized	Pearson Correlation	.221*	.235*	.265**	.403**	.636**	.652**	1
	Sig. (2-tailed)	.016	.010	.004	.000	.000	.000	
	N	118	118	118	118	118	118	118
Scores for N_IPIP	Pearson Correlation	-.077	-.285**	-.144	-.121	-.384**	-.218*	-.166
	Sig. (2-tailed)	.418	.002	.129	.201	.000	.020	.079
	N	113	113	113	113	113	113	113
Scores for E_IPIP	Pearson Correlation	.117	.249**	.322**	.315**	.401**	.417**	.342**
	Sig. (2-tailed)	.217	.008	.001	.001	.000	.000	.000
	N	113	113	113	113	113	113	113
Scores for O_IPIP	Pearson Correlation	.051	.026	.203*	.157	.355**	.105	.119
	Sig. (2-tailed)	.592	.788	.031	.096	.000	.267	.210
	N	113	113	113	113	113	113	113
Scores for A_IPIP	Pearson Correlation	.564**	.521**	.524**	.589**	.303**	.419**	.216*
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.022
	N	113	113	113	113	113	113	113

Predictor and Criterion Variables - Non-officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Scores for C_IPIP	Pearson Correlation	.223*	.298**	.317**	.311**	.617**	.727**	.760**
	Sig. (2-tailed)	.017	.001	.001	.001	.000	.000	.000
	N	113	113	113	113	113	113	113
Scores for N_TSD	Pearson Correlation	-.198*	-.431**	-.247*	-.236*	-.470**	-.365**	-.297**
	Sig. (2-tailed)	.045	.000	.012	.016	.000	.000	.002
	N	103	103	103	103	103	103	103
Scores for E_TSD	Pearson Correlation	.110	.373**	.351**	.350**	.503**	.454**	.401**
	Sig. (2-tailed)	.256	.000	.000	.000	.000	.000	.000
	N	108	108	108	108	108	108	108
Scores for O_TSD	Pearson Correlation	.195*	-.089	.082	.221*	.242*	.141	.128
	Sig. (2-tailed)	.041	.354	.393	.020	.011	.142	.181
	N	110	110	110	110	110	110	110
Scores for A_TSD	Pearson Correlation	.709**	.726**	.676**	.878**	.519**	.443**	.388**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	104	104	104	104	104	104	104
Scores for C_TSD	Pearson Correlation	.270**	.333**	.357**	.519**	.877**	.788**	.891**
	Sig. (2-tailed)	.005	.000	.000	.000	.000	.000	.000
	N	108	108	108	108	108	108	108
vs_perc	Pearson Correlation	-.332	-.463*	-.298	-.248	-.154	-.124	-.159
	Sig. (2-tailed)	.122	.026	.167	.255	.483	.574	.469
	N	23	23	23	23	23	23	23
sa_perc	Pearson Correlation	.005	-.056	-.094	-.178	-.016	.204	-.024
	Sig. (2-tailed)	.983	.799	.669	.416	.941	.350	.914
	N	23	23	23	23	23	23	23
ps_perc	Pearson Correlation	-.264	-.204	-.123	-.102	.033	.062	-.049
	Sig. (2-tailed)	.224	.351	.576	.643	.881	.778	.825
	N	23	23	23	23	23	23	23
tot_perc	Pearson Correlation	-.269	-.295	-.189	-.188	-.034	.037	-.113
	Sig. (2-tailed)	.214	.172	.388	.391	.877	.865	.607
	N	23	23	23	23	23	23	23
gender	Pearson Correlation	.059	-.141	-.024	-.174	-.215*	-.115	-.119
	Sig. (2-tailed)	.542	.142	.802	.068	.024	.230	.217
	N	110	110	110	110	110	110	110

Predictor and Criterion Variables - Non-officers

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Birth_Yr	Pearson Correlation	.102	.196*	.002	-.070	-.135	-.083	-.140
	Sig. (2-tailed)	.290	.041	.988	.470	.162	.393	.146
	N	109	109	109	109	109	109	109
edulevel	Pearson Correlation	-.057	.232	.188	.325	.120	-.460	-.303
	Sig. (2-tailed)	.861	.468	.558	.303	.711	.132	.338
	N	12	12	12	12	12	12	12
language	Pearson Correlation	-.239	-.076	-.310	.033	-.120	-.112	-.032
	Sig. (2-tailed)	.239	.713	.123	.872	.559	.586	.877
	N	26	26	26	26	26	26	26

Predictor and Criterion Variables - Non-officers

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
leader	Pearson Correlation	-.136	.122	.021	.152	.128	-.021	.125
	Sig. (2-tailed)	.166	.214	.833	.121	.195	.840	.220
	N	105	105	105	105	105	94	98
insp	Pearson Correlation	-.004	.079	.044	.031	-.009	-.035	.154
	Sig. (2-tailed)	.969	.424	.657	.754	.929	.735	.129
	N	105	105	105	105	105	94	98
support	Pearson Correlation	-.128	.155	-.058	.131	.104	-.080	.108
	Sig. (2-tailed)	.194	.116	.558	.182	.289	.443	.288
	N	105	105	105	105	105	94	98
standard	Pearson Correlation	-.121	.100	.067	.082	.150	-.034	.096
	Sig. (2-tailed)	.217	.309	.495	.405	.127	.746	.349
	N	105	105	105	105	105	94	98
contextual	Pearson Correlation	-.077	.132	-.011	.093	.057	-.065	.142
	Sig. (2-tailed)	.435	.180	.911	.344	.566	.534	.162
	N	105	105	105	105	105	94	98
task	Pearson Correlation	-.139	.120	.049	.125	.150	-.030	.118
	Sig. (2-tailed)	.158	.225	.623	.204	.126	.777	.246
	N	105	105	105	105	105	94	98
total	Pearson Correlation	-.108	.132	.016	.113	.108	-.042	.138
	Sig. (2-tailed)	.272	.180	.871	.251	.271	.687	.176
	N	105	105	105	105	105	94	98
N1 Nervous and Stressed Out	Pearson Correlation	.787**	-.491**	-.299**	-.222*	-.504**	.940**	-.501**
	Sig. (2-tailed)	.000	.000	.001	.018	.000	.000	.000
	N	113	113	113	113	113	103	108
N2 Worrying	Pearson Correlation	.800**	-.511**	-.297**	-.259**	-.422**	.923**	-.587**
	Sig. (2-tailed)	.000	.000	.001	.006	.000	.000	.000
	N	113	113	113	113	113	103	108
N3 Irritable	Pearson Correlation	.678**	-.174	-.128	-.233*	-.237*	.799**	-.331**
	Sig. (2-tailed)	.000	.066	.178	.013	.012	.000	.000
	N	113	113	113	113	113	103	108
N4 Envious and Jealous	Pearson Correlation	.587**	-.358**	-.249**	-.277**	-.393**	.748**	-.464**
	Sig. (2-tailed)	.000	.000	.008	.003	.000	.000	.000
	N	113	113	113	113	113	103	108

Predictor and Criterion Variables - Non-officers

Correlations

		nipiptransf ormed	Scores for E IPIP	Scores for O IPIP	Scores for A IPIP	Scores for C IPIP	Scores for N TSD	Scores for E TSD
E1 Shy and Bashful	Pearson Correlation	.490**	-.818**	-.290**	-.312**	-.373**	.526**	-.939**
	Sig. (2-tailed)	.000	.000	.002	.001	.000	.000	.000
	N	113	113	113	113	113	103	108
E2 Talkative	Pearson Correlation	-.332**	.746**	.326**	.425**	.319**	-.303**	.808**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.002	.000
	N	113	113	113	113	113	103	108
E3 Socially Active	Pearson Correlation	-.377**	.729**	.223*	.407**	.366**	-.426**	.766**
	Sig. (2-tailed)	.000	.000	.017	.000	.000	.000	.000
	N	113	113	113	113	113	103	108
E4 Assertive	Pearson Correlation	-.166	.319**	.408**	.134	.209*	-.192	.305**
	Sig. (2-tailed)	.078	.001	.000	.157	.026	.053	.001
	N	113	113	113	113	113	103	108
E5 Unsociable	Pearson Correlation	.425**	-.772**	-.227*	-.382**	-.362**	.481**	-.898**
	Sig. (2-tailed)	.000	.000	.015	.000	.000	.000	.000
	N	113	113	113	113	113	103	108
O1 Philosophical	Pearson Correlation	-.126	.100	.656**	.049	.123	-.117	.027
	Sig. (2-tailed)	.185	.293	.000	.603	.193	.238	.785
	N	113	113	113	113	113	103	108
O2 Scientific Interest	Pearson Correlation	-.143	.142	.527**	.004	.076	-.041	-.004
	Sig. (2-tailed)	.130	.132	.000	.965	.426	.678	.967
	N	113	113	113	113	113	103	108
O3 Creative	Pearson Correlation	-.303**	.293**	.540**	.134	.237*	-.357**	.272**
	Sig. (2-tailed)	.001	.002	.000	.156	.012	.000	.004
	N	113	113	113	113	113	103	108
O4 Reflective	Pearson Correlation	-.019	.036	.525**	.076	.048	-.041	-.046
	Sig. (2-tailed)	.841	.707	.000	.426	.612	.683	.636
	N	113	113	113	113	113	103	108
O5 Cultured	Pearson Correlation	-.031	.069	.419**	.081	.014	-.068	-.007
	Sig. (2-tailed)	.746	.465	.000	.396	.883	.494	.945
	N	113	113	113	113	113	103	108
A1 Friendly	Pearson Correlation	-.422**	.509**	.104	.471**	.338**	-.459**	.565**
	Sig. (2-tailed)	.000	.000	.273	.000	.000	.000	.000
	N	113	113	113	113	113	103	108

Predictor and Criterion Variables - Non-officers

Correlations

		nipitransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
A2 Considerate	Pearson Correlation	-.077	.117	.051	.564**	.223*	-.198*	.110
	Sig. (2-tailed)	.418	.217	.592	.000	.017	.045	.256
	N	113	113	113	113	113	103	108
A3 Cold and Insensitive	Pearson Correlation	-.285**	.249**	.026	.521**	.298**	-.431**	.373**
	Sig. (2-tailed)	.002	.008	.788	.000	.001	.000	.000
	N	113	113	113	113	113	103	108
A4 Helpful	Pearson Correlation	-.144	.322**	.203*	.524**	.317**	-.247*	.351**
	Sig. (2-tailed)	.129	.001	.031	.000	.001	.012	.000
	N	113	113	113	113	113	103	108
A5 Warm and Sympathetic	Pearson Correlation	-.121	.315**	.157	.589**	.311**	-.236*	.350**
	Sig. (2-tailed)	.201	.001	.096	.000	.001	.016	.000
	N	113	113	113	113	113	103	108
C1 Efficient and Dependable	Pearson Correlation	-.384**	.401**	.355**	.303**	.617**	-.470**	.503**
	Sig. (2-tailed)	.000	.000	.000	.001	.000	.000	.000
	N	113	113	113	113	113	103	108
C2 Hard Working	Pearson Correlation	-.218*	.417**	.105	.419**	.727**	-.365**	.454**
	Sig. (2-tailed)	.020	.000	.267	.000	.000	.000	.000
	N	113	113	113	113	113	103	108
C3 Organized	Pearson Correlation	-.166	.342**	.119	.216*	.760**	-.297**	.401**
	Sig. (2-tailed)	.079	.000	.210	.022	.000	.002	.000
	N	113	113	113	113	113	103	108
Scores for N_IPIP	Pearson Correlation	1	-.462**	-.325**	-.243**	-.365**	.845**	-.460**
	Sig. (2-tailed)		.000	.000	.009	.000	.000	.000
	N	113	113	113	113	113	99	104
Scores for E_IPIP	Pearson Correlation	-.462**	1	.420**	.460**	.421**	-.429**	.889**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	113	113	113	113	113	99	104
Scores for O_IPIP	Pearson Correlation	-.325**	.420**	1	.197*	.216*	-.267**	.306**
	Sig. (2-tailed)	.000	.000		.037	.022	.007	.002
	N	113	113	113	113	113	99	104
Scores for A_IPIP	Pearson Correlation	-.243**	.460**	.197*	1	.391**	-.212*	.403**
	Sig. (2-tailed)	.009	.000	.037		.000	.036	.000
	N	113	113	113	113	113	99	104

Predictor and Criterion Variables - Non-officers

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Scores for C_IPIP	Pearson Correlation	-.365**	.421**	.216*	.391**	1	-.461**	.427**
	Sig. (2-tailed)	.000	.000	.022	.000		.000	.000
	N	113	113	113	113	113	99	104
Scores for N_TSD	Pearson Correlation	.845**	-.429**	-.267**	-.212*	-.461**	1	-.509**
	Sig. (2-tailed)	.000	.000	.007	.036	.000		.000
	N	99	99	99	99	99	103	98
Scores for E_TSD	Pearson Correlation	-.460**	.889**	.306**	.403**	.427**	-.509**	1
	Sig. (2-tailed)	.000	.000	.002	.000	.000	.000	
	N	104	104	104	104	104	98	108
Scores for O_TSD	Pearson Correlation	-.122	.115	.694**	.120	.137	-.098	.015
	Sig. (2-tailed)	.211	.238	.000	.217	.159	.331	.884
	N	107	107	107	107	107	100	103
Scores for A_TSD	Pearson Correlation	-.308**	.390**	.156	.705**	.368**	-.407**	.447**
	Sig. (2-tailed)	.002	.000	.124	.000	.000	.000	.000
	N	99	99	99	99	99	95	98
Scores for C_TSD	Pearson Correlation	-.279**	.428**	.228*	.340**	.803**	-.418**	.507**
	Sig. (2-tailed)	.004	.000	.020	.000	.000	.000	.000
	N	104	104	104	104	104	98	101
vs_perc	Pearson Correlation	.047	-.106	.168	-.428*	-.119	-.090	-.102
	Sig. (2-tailed)	.832	.629	.444	.041	.588	.704	.661
	N	23	23	23	23	23	20	21
sa_perc	Pearson Correlation	-.245	.035	.004	-.188	.121	-.297	.236
	Sig. (2-tailed)	.260	.874	.985	.390	.583	.203	.303
	N	23	23	23	23	23	20	21
ps_perc	Pearson Correlation	-.114	.139	.225	-.110	.172	-.194	.068
	Sig. (2-tailed)	.604	.526	.302	.618	.432	.413	.768
	N	23	23	23	23	23	20	21
tot_perc	Pearson Correlation	-.106	.046	.226	-.259	.049	-.192	.056
	Sig. (2-tailed)	.631	.834	.299	.233	.825	.417	.810
	N	23	23	23	23	23	20	21
gender	Pearson Correlation	.059	-.131	-.038	.025	-.175	.106	-.104
	Sig. (2-tailed)	.550	.182	.698	.799	.074	.301	.299
	N	105	105	105	105	105	97	101

Predictor and Criterion Variables - Non-officers

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Birth_Yr	Pearson Correlation	-.101	.072	.153	.047	-.038	-.078	-.022
	Sig. (2-tailed)	.310	.468	.121	.633	.702	.453	.829
	N	104	104	104	104	104	96	100
edulevel	Pearson Correlation	.073	-.063	.363	.239	-.230	.195	-.151
	Sig. (2-tailed)	.821	.846	.246	.455	.471	.566	.677
	N	12	12	12	12	12	11	10
language	Pearson Correlation	.012	.019	-.124	-.213	-.162	.055	-.060
	Sig. (2-tailed)	.955	.931	.565	.317	.450	.793	.786
	N	24	24	24	24	24	25	23

Predictor and Criterion Variables - Non-officers

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
leader	Pearson Correlation	-.043	.130	.116	.192	-.028	.064	.131	-.151
	Sig. (2-tailed)	.669	.211	.252	.393	.901	.777	.562	.131
	N	101	94	99	22	22	22	22	101
insp	Pearson Correlation	.034	.075	.117	.210	.198	.197	.248	.086
	Sig. (2-tailed)	.734	.473	.251	.348	.377	.380	.266	.392
	N	101	94	99	22	22	22	22	101
support	Pearson Correlation	-.088	.120	.087	.168	-.204	.041	.048	-.174
	Sig. (2-tailed)	.379	.250	.391	.455	.363	.856	.831	.082
	N	101	94	99	22	22	22	22	101
standard	Pearson Correlation	.009	.135	.178	.168	.061	-.018	.085	-.190
	Sig. (2-tailed)	.932	.196	.078	.455	.788	.935	.707	.056
	N	101	94	99	22	22	22	22	101
contextual	Pearson Correlation	-.033	.108	.113	.204	-.027	.121	.150	-.054
	Sig. (2-tailed)	.747	.300	.267	.361	.903	.592	.505	.591
	N	101	94	99	22	22	22	22	101
task	Pearson Correlation	-.018	.142	.159	.194	.021	.022	.115	-.185
	Sig. (2-tailed)	.862	.172	.115	.387	.927	.923	.609	.063
	N	101	94	99	22	22	22	22	101
total	Pearson Correlation	-.033	.126	.141	.214	-.002	.074	.142	-.129
	Sig. (2-tailed)	.743	.225	.164	.338	.993	.744	.529	.198
	N	101	94	99	22	22	22	22	101
N1 Nervous and Stressed Out	Pearson Correlation	-.096	-.333**	-.417**	-.089	-.152	-.218	-.155	.067
	Sig. (2-tailed)	.318	.001	.000	.687	.489	.317	.479	.488
	N	110	104	108	23	23	23	23	110
N2 Worrying	Pearson Correlation	-.037	-.396**	-.371**	-.106	-.237	-.068	-.135	.128
	Sig. (2-tailed)	.704	.000	.000	.629	.277	.759	.539	.181
	N	110	104	108	23	23	23	23	110
N3 Irritable	Pearson Correlation	-.043	-.405**	-.221*	.297	.007	.155	.204	-.049
	Sig. (2-tailed)	.654	.000	.021	.169	.975	.480	.350	.609
	N	110	104	108	23	23	23	23	110
N4 Envious and Jealous	Pearson Correlation	-.138	-.502**	-.478**	.064	-.222	-.087	-.063	.118
	Sig. (2-tailed)	.151	.000	.000	.773	.308	.694	.775	.220
	N	110	104	108	23	23	23	23	110

Predictor and Criterion Variables - Non-officers

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
E1 Shy and Bashful	Pearson Correlation	.019	-.318**	-.401**	.103	.049	-.021	.043	.122
	Sig. (2-tailed)	.845	.001	.000	.641	.825	.923	.846	.204
	N	110	104	108	23	23	23	23	110
E2 Talkative	Pearson Correlation	.107	.449**	.410**	-.106	.009	.184	.107	-.115
	Sig. (2-tailed)	.265	.000	.000	.632	.968	.401	.628	.232
	N	110	104	108	23	23	23	23	110
E3 Socially Active	Pearson Correlation	.085	.468**	.392**	.063	.100	.213	.175	-.103
	Sig. (2-tailed)	.376	.000	.000	.776	.651	.330	.424	.285
	N	110	104	108	23	23	23	23	110
E4 Assertive	Pearson Correlation	.512**	.149	.379**	.072	.131	.168	.167	.034
	Sig. (2-tailed)	.000	.130	.000	.745	.551	.444	.446	.726
	N	110	104	108	23	23	23	23	110
E5 Unsociable	Pearson Correlation	.041	-.458**	-.455**	-.049	-.081	-.062	-.081	.116
	Sig. (2-tailed)	.671	.000	.000	.825	.713	.778	.714	.227
	N	110	104	108	23	23	23	23	110
O1 Philosophical	Pearson Correlation	.909**	.172	.210*	.280	.149	.116	.200	-.013
	Sig. (2-tailed)	.000	.081	.029	.196	.497	.599	.360	.893
	N	110	104	108	23	23	23	23	110
O2 Scientific Interest	Pearson Correlation	.791**	.046	.139	.379	.119	.353	.357	-.013
	Sig. (2-tailed)	.000	.640	.153	.074	.587	.099	.095	.890
	N	110	104	108	23	23	23	23	110
O3 Creative	Pearson Correlation	.529**	.318**	.349**	-.153	.253	.115	.094	-.049
	Sig. (2-tailed)	.000	.001	.000	.485	.243	.600	.668	.613
	N	110	104	108	23	23	23	23	110
O4 Reflective	Pearson Correlation	.797**	.208*	.159	.147	.085	.281	.279	-.036
	Sig. (2-tailed)	.000	.034	.100	.503	.701	.194	.197	.708
	N	110	104	108	23	23	23	23	110
O5 Cultured	Pearson Correlation	.688**	.091	.088	.310	.268	.196	.305	.066
	Sig. (2-tailed)	.000	.356	.364	.150	.217	.369	.157	.495
	N	110	104	108	23	23	23	23	110
A1 Friendly	Pearson Correlation	.046	.679**	.379**	-.172	.222	-.025	-.018	-.057
	Sig. (2-tailed)	.636	.000	.000	.431	.309	.909	.933	.552
	N	110	104	108	23	23	23	23	110

Predictor and Criterion Variables - Non-officers

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
A2 Considerate	Pearson Correlation	.195*	.709**	.270**	-.332	.005	-.264	-.269	.059
	Sig. (2-tailed)	.041	.000	.005	.122	.983	.224	.214	.542
	N	110	104	108	23	23	23	23	110
A3 Cold and Insensitive	Pearson Correlation	-.089	.726**	.333**	-.463*	-.056	-.204	-.295	-.141
	Sig. (2-tailed)	.354	.000	.000	.026	.799	.351	.172	.142
	N	110	104	108	23	23	23	23	110
A4 Helpful	Pearson Correlation	.082	.676**	.357**	-.298	-.094	-.123	-.189	-.024
	Sig. (2-tailed)	.393	.000	.000	.167	.669	.576	.388	.802
	N	110	104	108	23	23	23	23	110
A5 Warm and Sympathetic	Pearson Correlation	.221*	.878**	.519**	-.248	-.178	-.102	-.188	-.174
	Sig. (2-tailed)	.020	.000	.000	.255	.416	.643	.391	.068
	N	110	104	108	23	23	23	23	110
C1 Efficient and Dependable	Pearson Correlation	.242*	.519**	.877**	-.154	-.016	.033	-.034	-.215*
	Sig. (2-tailed)	.011	.000	.000	.483	.941	.881	.877	.024
	N	110	104	108	23	23	23	23	110
C2 Hard Working	Pearson Correlation	.141	.443**	.788**	-.124	.204	.062	.037	-.115
	Sig. (2-tailed)	.142	.000	.000	.574	.350	.778	.865	.230
	N	110	104	108	23	23	23	23	110
C3 Organized	Pearson Correlation	.128	.388**	.891**	-.159	-.024	-.049	-.113	-.119
	Sig. (2-tailed)	.181	.000	.000	.469	.914	.825	.607	.217
	N	110	104	108	23	23	23	23	110
Scores for N_IPIP	Pearson Correlation	-.122	-.308**	-.279**	.047	-.245	-.114	-.106	.059
	Sig. (2-tailed)	.211	.002	.004	.832	.260	.604	.631	.550
	N	107	99	104	23	23	23	23	105
Scores for E_IPIP	Pearson Correlation	.115	.390**	.428**	-.106	.035	.139	.046	-.131
	Sig. (2-tailed)	.238	.000	.000	.629	.874	.526	.834	.182
	N	107	99	104	23	23	23	23	105
Scores for O_IPIP	Pearson Correlation	.694**	.156	.228*	.168	.004	.225	.226	-.038
	Sig. (2-tailed)	.000	.124	.020	.444	.985	.302	.299	.698
	N	107	99	104	23	23	23	23	105
Scores for A_IPIP	Pearson Correlation	.120	.705**	.340**	-.428*	-.188	-.110	-.259	.025
	Sig. (2-tailed)	.217	.000	.000	.041	.390	.618	.233	.799
	N	107	99	104	23	23	23	23	105

Predictor and Criterion Variables - Non-officers

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Scores for C_IPIP	Pearson Correlation	.137	.368**	.803**	-.119	.121	.172	.049	-.175
	Sig. (2-tailed)	.159	.000	.000	.588	.583	.432	.825	.074
	N	107	99	104	23	23	23	23	105
Scores for N_TSD	Pearson Correlation	-.098	-.407**	-.418**	-.090	-.297	-.194	-.192	.106
	Sig. (2-tailed)	.331	.000	.000	.704	.203	.413	.417	.301
	N	100	95	98	20	20	20	20	97
Scores for E_TSD	Pearson Correlation	.015	.447**	.507**	-.102	.236	.068	.056	-.104
	Sig. (2-tailed)	.884	.000	.000	.661	.303	.768	.810	.299
	N	103	98	101	21	21	21	21	101
Scores for O_TSD	Pearson Correlation	1	.177	.213*	.300	.193	.289	.332	.009
	Sig. (2-tailed)		.080	.030	.175	.390	.192	.131	.930
	N	110	99	103	22	22	22	22	103
Scores for A_TSD	Pearson Correlation	.177	1	.517**	-.405	.031	-.165	-.213	-.022
	Sig. (2-tailed)	.080		.000	.077	.895	.488	.367	.833
	N	99	104	96	20	20	20	20	98
Scores for C_TSD	Pearson Correlation	.213*	.517**	1	-.176	.032	.020	-.053	-.146
	Sig. (2-tailed)	.030	.000		.434	.889	.930	.814	.146
	N	103	96	108	22	22	22	22	101
vs_perc	Pearson Correlation	.300	-.405	-.176	1	.310	.605**	.782**	-.561**
	Sig. (2-tailed)	.175	.077	.434		.151	.002	.000	.005
	N	22	20	22	23	23	23	23	23
sa_perc	Pearson Correlation	.193	.031	.032	.310	1	.430*	.623**	-.222
	Sig. (2-tailed)	.390	.895	.889	.151		.041	.001	.308
	N	22	20	22	23	23	23	23	23
ps_perc	Pearson Correlation	.289	-.165	.020	.605**	.430*	1	.921**	-.572**
	Sig. (2-tailed)	.192	.488	.930	.002	.041		.000	.004
	N	22	20	22	23	23	23	23	23
tot_perc	Pearson Correlation	.332	-.213	-.053	.782**	.623**	.921**	1	-.587**
	Sig. (2-tailed)	.131	.367	.814	.000	.001	.000		.003
	N	22	20	22	23	23	23	23	23
gender	Pearson Correlation	.009	-.022	-.146	-.561**	-.222	-.572**	-.587**	1
	Sig. (2-tailed)	.930	.833	.146	.005	.308	.004	.003	
	N	103	98	101	23	23	23	23	110

Predictor and Criterion Variables - Non-officers

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Birth_Yr	Pearson Correlation	.056	-.035	-.138	-.019	.235	.124	.170	-.082
	Sig. (2-tailed)	.573	.735	.170	.932	.293	.581	.451	.398
	N	102	97	101	22	22	22	22	109
edulevel	Pearson Correlation	.200	.152	-.128	-.500	-.504	-.115	-.239	-.293
	Sig. (2-tailed)	.555	.676	.691	.254	.248	.807	.605	.356
	N	11	10	12	7	7	7	7	12
language	Pearson Correlation	-.049	-.064	-.092	-.312	-.227	-.640	-.468	.177
	Sig. (2-tailed)	.820	.776	.657	.452	.588	.087	.242	.387
	N	24	22	26	8	8	8	8	26

Predictor and Criterion Variables - Non-officers

Correlations

		Birth_Yr	edulevel	language
leader	Pearson Correlation	.134	.418	.214
	Sig. (2-tailed)	.183	.176	.314
	N	100	12	24
insp	Pearson Correlation	-.015	-.071	-.194
	Sig. (2-tailed)	.886	.826	.364
	N	100	12	24
support	Pearson Correlation	.093	-.051	-.119
	Sig. (2-tailed)	.357	.875	.581
	N	100	12	24
standard	Pearson Correlation	.063	.361	-.173
	Sig. (2-tailed)	.530	.248	.418
	N	100	12	24
contextual	Pearson Correlation	.046	-.071	-.187
	Sig. (2-tailed)	.650	.826	.381
	N	100	12	24
task	Pearson Correlation	.105	.415	.008
	Sig. (2-tailed)	.298	.180	.972
	N	100	12	24
total	Pearson Correlation	.075	.195	-.106
	Sig. (2-tailed)	.455	.545	.622
	N	100	12	24
N1 Nervous and Stressed Out	Pearson Correlation	-.076	-.003	-.013
	Sig. (2-tailed)	.430	.994	.952
	N	109	12	26
N2 Worrying	Pearson Correlation	-.143	.204	.049
	Sig. (2-tailed)	.137	.525	.811
	N	109	12	26
N3 Irritable	Pearson Correlation	-.034	.234	.208
	Sig. (2-tailed)	.729	.463	.308
	N	109	12	26
N4 Envious and Jealous	Pearson Correlation	-.057	.073	.063
	Sig. (2-tailed)	.553	.823	.762
	N	109	12	26

Predictor and Criterion Variables - Non-officers

Correlations

		Birth_Yr	edulevel	language
E1 Shy and Bashful	Pearson Correlation	-.021	-.018	-.048
	Sig. (2-tailed)	.828	.956	.817
	N	109	12	26
E2 Talkative	Pearson Correlation	.082	.203	.056
	Sig. (2-tailed)	.399	.526	.786
	N	109	12	26
E3 Socially Active	Pearson Correlation	-.022	.008	-.086
	Sig. (2-tailed)	.821	.981	.677
	N	109	12	26
E4 Assertive	Pearson Correlation	-.118	.298	-.221
	Sig. (2-tailed)	.223	.347	.277
	N	109	12	26
E5 Unsociable	Pearson Correlation	.000	-.171	.112
	Sig. (2-tailed)	.997	.595	.585
	N	109	12	26
O1 Philosophical	Pearson Correlation	.047	.055	-.036
	Sig. (2-tailed)	.627	.864	.860
	N	109	12	26
O2 Scientific Interest	Pearson Correlation	.044	.228	.116
	Sig. (2-tailed)	.653	.476	.573
	N	109	12	26
O3 Creative	Pearson Correlation	.065	-.153	.044
	Sig. (2-tailed)	.500	.635	.831
	N	109	12	26
O4 Reflective	Pearson Correlation	-.011	.127	-.171
	Sig. (2-tailed)	.913	.694	.403
	N	109	12	26
O5 Cultured	Pearson Correlation	-.092	.190	.048
	Sig. (2-tailed)	.339	.555	.815
	N	109	12	26
A1 Friendly	Pearson Correlation	-.005	-.369	-.122
	Sig. (2-tailed)	.960	.238	.552
	N	109	12	26

Predictor and Criterion Variables - Non-officers

Correlations

		Birth_Yr	edulevel	language
A2 Considerate	Pearson Correlation	.102	-.057	-.239
	Sig. (2-tailed)	.290	.861	.239
	N	109	12	26
A3 Cold and Insensitive	Pearson Correlation	.196*	.232	-.076
	Sig. (2-tailed)	.041	.468	.713
	N	109	12	26
A4 Helpful	Pearson Correlation	.002	.188	-.310
	Sig. (2-tailed)	.988	.558	.123
	N	109	12	26
A5 Warm and Sympathetic	Pearson Correlation	-.070	.325	.033
	Sig. (2-tailed)	.470	.303	.872
	N	109	12	26
C1 Efficient and Dependable	Pearson Correlation	-.135	.120	-.120
	Sig. (2-tailed)	.162	.711	.559
	N	109	12	26
C2 Hard Working	Pearson Correlation	-.083	-.460	-.112
	Sig. (2-tailed)	.393	.132	.586
	N	109	12	26
C3 Organized	Pearson Correlation	-.140	-.303	-.032
	Sig. (2-tailed)	.146	.338	.877
	N	109	12	26
Scores for N_IPIP	Pearson Correlation	-.101	.073	.012
	Sig. (2-tailed)	.310	.821	.955
	N	104	12	24
Scores for E_IPIP	Pearson Correlation	.072	-.063	.019
	Sig. (2-tailed)	.468	.846	.931
	N	104	12	24
Scores for O_IPIP	Pearson Correlation	.153	.363	-.124
	Sig. (2-tailed)	.121	.246	.565
	N	104	12	24
Scores for A_IPIP	Pearson Correlation	.047	.239	-.213
	Sig. (2-tailed)	.633	.455	.317
	N	104	12	24

Predictor and Criterion Variables - Non-officers

Correlations

		Birth_Yr	edulevel	language
Scores for C_IPIP	Pearson Correlation	-.038	-.230	-.162
	Sig. (2-tailed)	.702	.471	.450
	N	104	12	24
Scores for N_TSD	Pearson Correlation	-.078	.195	.055
	Sig. (2-tailed)	.453	.566	.793
	N	96	11	25
Scores for E_TSD	Pearson Correlation	-.022	-.151	-.060
	Sig. (2-tailed)	.829	.677	.786
	N	100	10	23
Scores for O_TSD	Pearson Correlation	.056	.200	-.049
	Sig. (2-tailed)	.573	.555	.820
	N	102	11	24
Scores for A_TSD	Pearson Correlation	-.035	.152	-.064
	Sig. (2-tailed)	.735	.676	.776
	N	97	10	22
Scores for C_TSD	Pearson Correlation	-.138	-.128	-.092
	Sig. (2-tailed)	.170	.691	.657
	N	101	12	26
vs_perc	Pearson Correlation	-.019	-.500	-.312
	Sig. (2-tailed)	.932	.254	.452
	N	22	7	8
sa_perc	Pearson Correlation	.235	-.504	-.227
	Sig. (2-tailed)	.293	.248	.588
	N	22	7	8
ps_perc	Pearson Correlation	.124	-.115	-.640
	Sig. (2-tailed)	.581	.807	.087
	N	22	7	8
tot_perc	Pearson Correlation	.170	-.239	-.468
	Sig. (2-tailed)	.451	.605	.242
	N	22	7	8
gender	Pearson Correlation	-.082	-.293	.177
	Sig. (2-tailed)	.398	.356	.387
	N	109	12	26

Predictor and Criterion Variables - Non-officers

Correlations

		Birth_Yr	edulevel	language
Birth_Yr	Pearson Correlation	1	.462	-.243
	Sig. (2-tailed)		.131	.233
	N	109	12	26
edulevel	Pearson Correlation	.462	1	-.120
	Sig. (2-tailed)	.131		.711
	N	12	12	12
language	Pearson Correlation	-.243	-.120	1
	Sig. (2-tailed)	.233	.711	
	N	26	12	26

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Predictor and Criterion Measures - Combined Group

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
leader	Pearson Correlation	1	.688**	.673**	.622**	.747**	.906**	.870**	.056
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.413
	N	218	218	218	218	218	218	218	218
insp	Pearson Correlation	.688**	1	.659**	.630**	.907**	.732**	.855**	.055
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.423
	N	218	218	218	218	218	218	218	218
support	Pearson Correlation	.673**	.659**	1	.689**	.915**	.756**	.874**	.071
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.299
	N	218	218	218	218	218	218	218	218
standard	Pearson Correlation	.622**	.630**	.689**	1	.725**	.896**	.852**	.033
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.633
	N	218	218	218	218	218	218	218	218
contextual	Pearson Correlation	.747**	.907**	.915**	.725**	1	.817**	.949**	.069
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.311
	N	218	218	218	218	218	218	218	218
task	Pearson Correlation	.906**	.732**	.756**	.896**	.817**	1	.956**	.049
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.469
	N	218	218	218	218	218	218	218	218
total	Pearson Correlation	.870**	.855**	.874**	.852**	.949**	.956**	1	.065
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.337
	N	218	218	218	218	218	218	218	218
N1 Nervous and Stressed Out	Pearson Correlation	.056	.055	.071	.033	.069	.049	.065	1
	Sig. (2-tailed)	.413	.423	.299	.633	.311	.469	.337	
	N	218	218	218	218	218	218	218	318
N2 Worrying	Pearson Correlation	.004	.000	.026	-.023	.014	-.010	.007	.777**
	Sig. (2-tailed)	.951	1.000	.706	.739	.832	.885	.918	.000
	N	218	218	218	218	218	218	218	318
N3 Irritable	Pearson Correlation	.042	-.006	.038	-.001	.018	.024	.026	.575**
	Sig. (2-tailed)	.535	.930	.574	.992	.788	.729	.704	.000
	N	218	218	218	218	218	218	218	318
N4 Envious and Jealous	Pearson Correlation	-.064	-.087	-.075	-.104	-.089	-.093	-.093	.566**
	Sig. (2-tailed)	.347	.200	.269	.125	.191	.172	.171	.000
	N	218	218	218	218	218	218	218	318

Predictor and Criterion Measures - Combined Group

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
E1 Shy and Bashful	Pearson Correlation	-.183**	-.114	-.099	-.099	-.117	-.158*	-.145*	.509**
	Sig. (2-tailed)	.007	.092	.146	.145	.085	.020	.032	.000
	N	218	218	218	218	218	218	218	318
E2 Talkative	Pearson Correlation	.123	.113	.092	.113	.112	.131	.126	-.165**
	Sig. (2-tailed)	.070	.095	.178	.097	.098	.053	.062	.003
	N	218	218	218	218	218	218	218	318
E3 Socially Active	Pearson Correlation	-.127	-.087	-.047	-.131	-.073	-.143*	-.115	-.287**
	Sig. (2-tailed)	.062	.203	.494	.053	.286	.035	.091	.000
	N	218	218	218	218	218	218	218	318
E4 Assertive	Pearson Correlation	-.060	.004	-.093	-.011	-.050	-.040	-.050	-.121*
	Sig. (2-tailed)	.377	.952	.173	.877	.465	.558	.462	.031
	N	218	218	218	218	218	218	218	318
E5 Unsociable	Pearson Correlation	-.030	-.055	-.032	-.053	-.048	-.046	-.047	.439**
	Sig. (2-tailed)	.661	.419	.634	.438	.484	.503	.487	.000
	N	218	218	218	218	218	218	218	318
O1 Philosophical	Pearson Correlation	.019	.065	.012	.054	.041	.040	.041	-.100
	Sig. (2-tailed)	.785	.341	.864	.429	.544	.559	.549	.076
	N	218	218	218	218	218	218	218	318
O2 Scientific Interest	Pearson Correlation	.020	-.015	-.035	-.056	-.028	-.019	-.025	-.102
	Sig. (2-tailed)	.768	.827	.607	.408	.685	.779	.710	.068
	N	218	218	218	218	218	218	218	318
O3 Creative	Pearson Correlation	-.091	-.022	-.029	-.050	-.028	-.079	-.057	-.271**
	Sig. (2-tailed)	.182	.752	.673	.462	.685	.247	.401	.000
	N	218	218	218	218	218	218	218	318
O4 Reflective	Pearson Correlation	-.204**	-.098	-.108	-.144*	-.113	-.194**	-.166*	.043
	Sig. (2-tailed)	.002	.148	.112	.033	.095	.004	.014	.449
	N	218	218	218	218	218	218	218	318
O5 Cultured	Pearson Correlation	.005	.035	-.016	-.008	.009	-.001	.002	-.048
	Sig. (2-tailed)	.938	.609	.810	.904	.889	.983	.971	.390
	N	218	218	218	218	218	218	218	318
A1 Friendly	Pearson Correlation	-.001	.089	.030	.071	.065	.038	.052	-.251**
	Sig. (2-tailed)	.987	.190	.660	.299	.342	.581	.443	.000
	N	218	218	218	218	218	218	218	318

Predictor and Criterion Measures - Combined Group

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
A2 Considerate	Pearson Correlation	.077	.071	.131	.137*	.111	.118	.120	-.034
	Sig. (2-tailed)	.258	.299	.054	.043	.101	.082	.077	.545
	N	218	218	218	218	218	218	218	318
A3 Cold and Insensitive	Pearson Correlation	.045	.042	.103	.145*	.080	.104	.095	-.157**
	Sig. (2-tailed)	.509	.537	.131	.032	.240	.125	.162	.005
	N	217	217	217	217	217	217	217	317
A4 Helpful	Pearson Correlation	-.055	-.006	.042	.026	.020	-.017	-.001	-.158**
	Sig. (2-tailed)	.422	.933	.541	.698	.766	.806	.993	.005
	N	218	218	218	218	218	218	218	318
A5 Warm and Sympathetic	Pearson Correlation	-.057	-.037	.007	.004	-.016	-.030	-.025	-.082
	Sig. (2-tailed)	.405	.589	.923	.954	.814	.659	.710	.143
	N	218	218	218	218	218	218	218	318
C1 Efficient and Dependable	Pearson Correlation	-.184**	-.124	-.135*	-.077	-.142*	-.147*	-.153*	-.412**
	Sig. (2-tailed)	.006	.067	.047	.256	.036	.030	.024	.000
	N	218	218	218	218	218	218	218	318
C2 Hard Working	Pearson Correlation	-.131	-.058	-.055	-.038	-.062	-.095	-.085	-.395**
	Sig. (2-tailed)	.053	.393	.419	.579	.362	.161	.213	.000
	N	218	218	218	218	218	218	218	318
C3 Organized	Pearson Correlation	-.135*	-.068	-.096	-.054	-.090	-.106	-.104	-.298**
	Sig. (2-tailed)	.047	.319	.159	.424	.185	.119	.126	.000
	N	218	218	218	218	218	218	218	318
Scores for N_IPIP	Pearson Correlation	-.023	.016	-.013	-.065	.001	-.049	-.022	.723**
	Sig. (2-tailed)	.735	.816	.855	.342	.983	.479	.753	.000
	N	214	214	214	214	214	214	214	311
Scores for E_IPIP	Pearson Correlation	.133	.085	.088	.073	.096	.116	.111	-.374**
	Sig. (2-tailed)	.052	.213	.198	.285	.164	.092	.107	.000
	N	214	214	214	214	214	214	214	311
Scores for O_IPIP	Pearson Correlation	.007	.025	-.002	.000	.012	.004	.005	-.274**
	Sig. (2-tailed)	.921	.718	.982	.998	.857	.954	.937	.000
	N	214	214	214	214	214	214	214	311
Scores for A_IPIP	Pearson Correlation	.051	.018	.091	.072	.061	.068	.065	-.106
	Sig. (2-tailed)	.461	.789	.185	.293	.374	.323	.342	.061
	N	214	214	214	214	214	214	214	311

Predictor and Criterion Measures - Combined Group

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Scores for C_IPIP	Pearson Correlation	-.069	-.091	-.078	.001	-.093	-.038	-.069	-.450**
	Sig. (2-tailed)	.318	.186	.255	.990	.177	.576	.315	.000
	N	214	214	214	214	214	214	214	311
Scores for N_TSD	Pearson Correlation	.035	.010	.027	-.002	.021	.018	.024	.913**
	Sig. (2-tailed)	.635	.887	.714	.981	.779	.802	.744	.000
	N	188	188	188	188	188	188	188	268
Scores for E_TSD	Pearson Correlation	.115	.094	.052	.033	.078	.083	.085	-.485**
	Sig. (2-tailed)	.111	.196	.476	.650	.283	.253	.243	.000
	N	192	192	192	192	192	192	192	275
Scores for O_TSD	Pearson Correlation	-.061	-.007	-.017	-.009	-.013	-.039	-.031	-.085
	Sig. (2-tailed)	.398	.927	.817	.905	.859	.590	.668	.155
	N	194	194	194	194	194	194	194	281
Scores for A_TSD	Pearson Correlation	.016	.015	.043	.080	.032	.052	.042	-.204**
	Sig. (2-tailed)	.823	.836	.558	.269	.663	.472	.565	.001
	N	191	191	191	191	191	191	191	271
Scores for C_TSD	Pearson Correlation	-.201**	-.130	-.173*	-.088	-.167*	-.161*	-.173*	-.420**
	Sig. (2-tailed)	.005	.070	.016	.225	.020	.025	.016	.000
	N	194	194	194	194	194	194	194	275
vs_perc	Pearson Correlation	.122	.034	.143	.136	.102	.150	.130	-.001
	Sig. (2-tailed)	.176	.705	.114	.131	.260	.096	.149	.984
	N	124	124	124	124	124	124	124	203
sa_perc	Pearson Correlation	.174	.038	.176	.144	.123	.186*	.169	.067
	Sig. (2-tailed)	.053	.673	.051	.110	.173	.039	.061	.342
	N	124	124	124	124	124	124	124	203
ps_perc	Pearson Correlation	.265**	.185*	.212*	.125	.225*	.230*	.240**	.021
	Sig. (2-tailed)	.003	.039	.018	.167	.012	.010	.007	.766
	N	124	124	124	124	124	124	124	203
tot_perc	Pearson Correlation	.258**	.146	.211*	.150	.203*	.239**	.234**	.020
	Sig. (2-tailed)	.004	.105	.019	.096	.024	.007	.009	.772
	N	124	124	124	124	124	124	124	203
gender	Pearson Correlation	-.146*	-.031	-.068	-.097	-.055	-.136	-.100	.027
	Sig. (2-tailed)	.036	.654	.330	.166	.430	.051	.153	.645
	N	207	207	207	207	207	207	207	295

Predictor and Criterion Measures - Combined Group

Correlations

		leader	insp	support	standard	contextual	task	total	N1 Nervous and Stressed Out
Birth_Yr	Pearson Correlation	-.180*	-.211*	-.098	-.162	-.168*	-.188*	-.191*	-.017
	Sig. (2-tailed)	.030	.011	.239	.051	.042	.023	.021	.818
	N	146	146	146	146	146	146	146	177
edulevel	Pearson Correlation	.292*	.276*	.350**	.452**	.366**	.447**	.432**	.066
	Sig. (2-tailed)	.029	.039	.008	.000	.006	.001	.001	.558
	N	56	56	56	56	56	56	56	81
language	Pearson Correlation	.288*	.121	.166	-.111	.162	.108	.138	.011
	Sig. (2-tailed)	.027	.362	.209	.401	.221	.415	.297	.922
	N	59	59	59	59	59	59	59	79

Predictor and Criterion Measures - Combined Group

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
leader	Pearson Correlation	.004	.042	-.064	-.183**	.123	-.127	-.060
	Sig. (2-tailed)	.951	.535	.347	.007	.070	.062	.377
	N	218	218	218	218	218	218	218
insp	Pearson Correlation	.000	-.006	-.087	-.114	.113	-.087	.004
	Sig. (2-tailed)	1.000	.930	.200	.092	.095	.203	.952
	N	218	218	218	218	218	218	218
support	Pearson Correlation	.026	.038	-.075	-.099	.092	-.047	-.093
	Sig. (2-tailed)	.706	.574	.269	.146	.178	.494	.173
	N	218	218	218	218	218	218	218
standard	Pearson Correlation	-.023	-.001	-.104	-.099	.113	-.131	-.011
	Sig. (2-tailed)	.739	.992	.125	.145	.097	.053	.877
	N	218	218	218	218	218	218	218
contextual	Pearson Correlation	.014	.018	-.089	-.117	.112	-.073	-.050
	Sig. (2-tailed)	.832	.788	.191	.085	.098	.286	.465
	N	218	218	218	218	218	218	218
task	Pearson Correlation	-.010	.024	-.093	-.158*	.131	-.143*	-.040
	Sig. (2-tailed)	.885	.729	.172	.020	.053	.035	.558
	N	218	218	218	218	218	218	218
total	Pearson Correlation	.007	.026	-.093	-.145*	.126	-.115	-.050
	Sig. (2-tailed)	.918	.704	.171	.032	.062	.091	.462
	N	218	218	218	218	218	218	218
N1 Nervous and Stressed Out	Pearson Correlation	.777**	.575**	.566**	.509**	-.165**	-.287**	-.121*
	Sig. (2-tailed)	.000	.000	.000	.000	.003	.000	.031
	N	318	318	318	318	318	318	318
N2 Worrying	Pearson Correlation	1	.548**	.587**	.585**	-.158**	-.247**	-.067
	Sig. (2-tailed)		.000	.000	.000	.005	.000	.234
	N	318	318	318	318	318	318	318
N3 Irritable	Pearson Correlation	.548**	1	.594**	.404**	-.152**	-.207**	.025
	Sig. (2-tailed)	.000		.000	.000	.007	.000	.658
	N	318	318	318	318	318	318	318
N4 Envious and Jealous	Pearson Correlation	.587**	.594**	1	.447**	-.157**	-.188**	-.029
	Sig. (2-tailed)	.000	.000		.000	.005	.001	.609
	N	318	318	318	318	318	318	318

Predictor and Criterion Measures - Combined Group

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
E1 Shy and Bashful	Pearson Correlation	.585**	.404**	.447**	1	-.501**	-.438**	-.003
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.953
	N	318	318	318	318	318	318	318
E2 Talkative	Pearson Correlation	-.158**	-.152**	-.157**	-.501**	1	.564**	.171**
	Sig. (2-tailed)	.005	.007	.005	.000		.000	.002
	N	318	318	318	318	318	318	318
E3 Socially Active	Pearson Correlation	-.247**	-.207**	-.188**	-.438**	.564**	1	.167**
	Sig. (2-tailed)	.000	.000	.001	.000	.000		.003
	N	318	318	318	318	318	318	318
E4 Assertive	Pearson Correlation	-.067	.025	-.029	-.003	.171**	.167**	1
	Sig. (2-tailed)	.234	.658	.609	.953	.002	.003	
	N	318	318	318	318	318	318	318
E5 Unsociable	Pearson Correlation	.450**	.386**	.389**	.638**	-.514**	-.605**	-.055
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.329
	N	318	318	318	318	318	318	318
O1 Philosophical	Pearson Correlation	-.098	-.123*	-.194**	-.112*	.155**	.072	.468**
	Sig. (2-tailed)	.080	.029	.001	.047	.006	.201	.000
	N	318	318	318	318	318	318	318
O2 Scientific Interest	Pearson Correlation	-.041	-.123*	-.105	-.068	.102	.147**	.310**
	Sig. (2-tailed)	.471	.029	.062	.227	.070	.009	.000
	N	318	318	318	318	318	318	318
O3 Creative	Pearson Correlation	-.199**	-.221**	-.272**	-.223**	.183**	.341**	.219**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.000
	N	318	318	318	318	318	318	318
O4 Reflective	Pearson Correlation	.059	-.004	.018	.105	.084	.122*	.360**
	Sig. (2-tailed)	.295	.947	.744	.061	.134	.029	.000
	N	318	318	318	318	318	318	318
O5 Cultured	Pearson Correlation	-.063	-.120*	-.131*	-.012	-.026	-.027	.226**
	Sig. (2-tailed)	.263	.032	.020	.828	.642	.633	.000
	N	318	318	318	318	318	318	318
A1 Friendly	Pearson Correlation	-.206**	-.378**	-.280**	-.283**	.472**	.544**	.057
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.311
	N	318	318	318	318	318	318	318

Predictor and Criterion Measures - Combined Group

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
A2 Considerate	Pearson Correlation	.013	-.284**	-.247**	-.016	.236**	.245**	.060
	Sig. (2-tailed)	.819	.000	.000	.770	.000	.000	.289
	N	318	318	318	318	318	318	318
A3 Cold and Insensitive	Pearson Correlation	-.221**	-.476**	-.380**	-.302**	.342**	.244**	-.071
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.206
	N	317	317	317	317	317	317	317
A4 Helpful	Pearson Correlation	-.077	-.215**	-.195**	-.103	.365**	.390**	.059
	Sig. (2-tailed)	.171	.000	.000	.066	.000	.000	.293
	N	318	318	318	318	318	318	318
A5 Warm and Sympathetic	Pearson Correlation	-.097	-.259**	-.275**	-.152**	.423**	.397**	.072
	Sig. (2-tailed)	.083	.000	.000	.007	.000	.000	.199
	N	318	318	318	318	318	318	318
C1 Efficient and Dependable	Pearson Correlation	-.354**	-.320**	-.395**	-.232**	.215**	.272**	.105
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.061
	N	318	318	318	318	318	318	318
C2 Hard Working	Pearson Correlation	-.260**	-.233**	-.322**	-.207**	.252**	.377**	.186**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001
	N	318	318	318	318	318	318	318
C3 Organized	Pearson Correlation	-.210**	-.188**	-.251**	-.195**	.198**	.346**	.071
	Sig. (2-tailed)	.000	.001	.000	.000	.000	.000	.205
	N	318	318	318	318	318	318	318
Scores for N_IPIP	Pearson Correlation	.736**	.663**	.545**	.465**	-.214**	-.293**	-.141*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.013
	N	311	311	311	311	311	311	311
Scores for E_IPIP	Pearson Correlation	-.348**	-.258**	-.268**	-.710**	.720**	.712**	.215**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	311	311
Scores for O_IPIP	Pearson Correlation	-.271**	-.252**	-.244**	-.309**	.235**	.201**	.314**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	311	311
Scores for A_IPIP	Pearson Correlation	-.094	-.290**	-.250**	-.221**	.450**	.431**	.148**
	Sig. (2-tailed)	.099	.000	.000	.000	.000	.000	.009
	N	311	311	311	311	311	311	311

Predictor and Criterion Measures - Combined Group

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Scores for C_IPIP	Pearson Correlation	-.342**	-.328**	-.356**	-.279**	.212**	.301**	.111
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.051
	N	311	311	311	311	311	311	311
Scores for N_TSD	Pearson Correlation	.880**	.797**	.748**	.554**	-.183**	-.270**	-.095
	Sig. (2-tailed)	.000	.000	.000	.000	.003	.000	.120
	N	268	268	268	268	268	268	268
Scores for E_TSD	Pearson Correlation	-.532**	-.442**	-.449**	-.898**	.752**	.734**	.156**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.009
	N	275	275	275	275	275	275	275
Scores for O_TSD	Pearson Correlation	-.050	-.135*	-.171**	-.083	.157**	.111	.503**
	Sig. (2-tailed)	.400	.023	.004	.166	.008	.063	.000
	N	281	281	281	281	281	281	281
Scores for A_TSD	Pearson Correlation	-.195**	-.469**	-.398**	-.274**	.499**	.478**	.070
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000	.248
	N	271	271	271	271	271	271	271
Scores for C_TSD	Pearson Correlation	-.307**	-.299**	-.385**	-.246**	.259**	.320**	.154*
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.011
	N	275	275	275	275	275	275	275
vs_perc	Pearson Correlation	.074	.048	.042	.037	.036	-.019	.078
	Sig. (2-tailed)	.293	.494	.553	.600	.607	.786	.266
	N	203	203	203	203	203	203	203
sa_perc	Pearson Correlation	.028	.043	-.048	.038	.009	.020	.054
	Sig. (2-tailed)	.692	.539	.493	.593	.897	.779	.445
	N	203	203	203	203	203	203	203
ps_perc	Pearson Correlation	.010	.037	-.041	-.007	.022	.024	.087
	Sig. (2-tailed)	.891	.603	.559	.917	.752	.735	.220
	N	203	203	203	203	203	203	203
tot_perc	Pearson Correlation	.022	.035	-.045	.009	.034	.016	.065
	Sig. (2-tailed)	.753	.622	.521	.903	.630	.819	.358
	N	203	203	203	203	203	203	203
gender	Pearson Correlation	-.005	-.063	.026	.057	-.093	.000	.034
	Sig. (2-tailed)	.931	.281	.662	.326	.109	.996	.566
	N	295	295	295	295	295	295	295

Predictor and Criterion Measures - Combined Group

Correlations

		N2 Worrying	N3 Irritable	N4 Envious and Jealous	E1 Shy and Bashful	E2 Talkative	E3 Socially Active	E4 Assertive
Birth_Yr	Pearson Correlation	.000	.044	.139	.115	.077	.081	-.088
	Sig. (2-tailed)	.996	.562	.066	.126	.309	.284	.243
	N	177	177	177	177	177	177	177
edulevel	Pearson Correlation	.105	.101	-.083	.043	-.126	-.117	.189
	Sig. (2-tailed)	.349	.371	.462	.701	.264	.297	.091
	N	81	81	81	81	81	81	81
language	Pearson Correlation	.071	.041	-.063	-.196	.221*	.020	-.094
	Sig. (2-tailed)	.536	.722	.580	.084	.050	.861	.408
	N	79	79	79	79	79	79	79

Predictor and Criterion Measures - Combined Group

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
leader	Pearson Correlation	-.030	.019	.020	-.091	-.204**	.005	-.001
	Sig. (2-tailed)	.661	.785	.768	.182	.002	.938	.987
	N	218	218	218	218	218	218	218
insp	Pearson Correlation	-.055	.065	-.015	-.022	-.098	.035	.089
	Sig. (2-tailed)	.419	.341	.827	.752	.148	.609	.190
	N	218	218	218	218	218	218	218
support	Pearson Correlation	-.032	.012	-.035	-.029	-.108	-.016	.030
	Sig. (2-tailed)	.634	.864	.607	.673	.112	.810	.660
	N	218	218	218	218	218	218	218
standard	Pearson Correlation	-.053	.054	-.056	-.050	-.144*	-.008	.071
	Sig. (2-tailed)	.438	.429	.408	.462	.033	.904	.299
	N	218	218	218	218	218	218	218
contextual	Pearson Correlation	-.048	.041	-.028	-.028	-.113	.009	.065
	Sig. (2-tailed)	.484	.544	.685	.685	.095	.889	.342
	N	218	218	218	218	218	218	218
task	Pearson Correlation	-.046	.040	-.019	-.079	-.194**	-.001	.038
	Sig. (2-tailed)	.503	.559	.779	.247	.004	.983	.581
	N	218	218	218	218	218	218	218
total	Pearson Correlation	-.047	.041	-.025	-.057	-.166*	.002	.052
	Sig. (2-tailed)	.487	.549	.710	.401	.014	.971	.443
	N	218	218	218	218	218	218	218
N1 Nervous and Stressed Out	Pearson Correlation	.439**	-.100	-.102	-.271**	.043	-.048	-.251**
	Sig. (2-tailed)	.000	.076	.068	.000	.449	.390	.000
	N	318	318	318	318	318	318	318
N2 Worrying	Pearson Correlation	.450**	-.098	-.041	-.199**	.059	-.063	-.206**
	Sig. (2-tailed)	.000	.080	.471	.000	.295	.263	.000
	N	318	318	318	318	318	318	318
N3 Irritable	Pearson Correlation	.386**	-.123*	-.123*	-.221**	-.004	-.120*	-.378**
	Sig. (2-tailed)	.000	.029	.029	.000	.947	.032	.000
	N	318	318	318	318	318	318	318
N4 Envious and Jealous	Pearson Correlation	.389**	-.194**	-.105	-.272**	.018	-.131*	-.280**
	Sig. (2-tailed)	.000	.001	.062	.000	.744	.020	.000
	N	318	318	318	318	318	318	318

Predictor and Criterion Measures - Combined Group

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
E1 Shy and Bashful	Pearson Correlation	.638**	-.112*	-.068	-.223**	.105	-.012	-.283**
	Sig. (2-tailed)	.000	.047	.227	.000	.061	.828	.000
	N	318	318	318	318	318	318	318
E2 Talkative	Pearson Correlation	-.514**	.155**	.102	.183**	.084	-.026	.472**
	Sig. (2-tailed)	.000	.006	.070	.001	.134	.642	.000
	N	318	318	318	318	318	318	318
E3 Socially Active	Pearson Correlation	-.605**	.072	.147**	.341**	.122*	-.027	.544**
	Sig. (2-tailed)	.000	.201	.009	.000	.029	.633	.000
	N	318	318	318	318	318	318	318
E4 Assertive	Pearson Correlation	-.055	.468**	.310**	.219**	.360**	.226**	.057
	Sig. (2-tailed)	.329	.000	.000	.000	.000	.000	.311
	N	318	318	318	318	318	318	318
E5 Unsociable	Pearson Correlation	1	-.009	.009	-.258**	.075	.044	-.449**
	Sig. (2-tailed)		.876	.875	.000	.180	.435	.000
	N	318	318	318	318	318	318	318
O1 Philosophical	Pearson Correlation	-.009	1	.611**	.341**	.612**	.484**	.103
	Sig. (2-tailed)	.876		.000	.000	.000	.000	.067
	N	318	318	318	318	318	318	318
O2 Scientific Interest	Pearson Correlation	.009	.611**	1	.366**	.483**	.459**	.136*
	Sig. (2-tailed)	.875	.000		.000	.000	.000	.016
	N	318	318	318	318	318	318	318
O3 Creative	Pearson Correlation	-.258**	.341**	.366**	1	.294**	.246**	.324**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	318	318	318	318	318	318	318
O4 Reflective	Pearson Correlation	.075	.612**	.483**	.294**	1	.397**	.117*
	Sig. (2-tailed)	.180	.000	.000	.000		.000	.037
	N	318	318	318	318	318	318	318
O5 Cultured	Pearson Correlation	.044	.484**	.459**	.246**	.397**	1	-.023
	Sig. (2-tailed)	.435	.000	.000	.000	.000		.681
	N	318	318	318	318	318	318	318
A1 Friendly	Pearson Correlation	-.449**	.103	.136*	.324**	.117*	-.023	1
	Sig. (2-tailed)	.000	.067	.016	.000	.037	.681	
	N	318	318	318	318	318	318	318

Predictor and Criterion Measures - Combined Group

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
A2 Considerate	Pearson Correlation	-.121*	.212**	.189**	.161**	.164**	.120*	.548**
	Sig. (2-tailed)	.031	.000	.001	.004	.003	.033	.000
	N	318	318	318	318	318	318	318
A3 Cold and Insensitive	Pearson Correlation	-.410**	.079	.009	.170**	.034	.006	.415**
	Sig. (2-tailed)	.000	.162	.871	.002	.549	.912	.000
	N	317	317	317	317	317	317	317
A4 Helpful	Pearson Correlation	-.234**	.140*	.133*	.273**	.196**	.089	.495**
	Sig. (2-tailed)	.000	.013	.018	.000	.000	.113	.000
	N	318	318	318	318	318	318	318
A5 Warm and Sympathetic	Pearson Correlation	-.368**	.218**	.143*	.336**	.242**	.104	.529**
	Sig. (2-tailed)	.000	.000	.011	.000	.000	.065	.000
	N	318	318	318	318	318	318	318
C1 Efficient and Dependable	Pearson Correlation	-.367**	.173**	.148**	.444**	.202**	.071	.287**
	Sig. (2-tailed)	.000	.002	.008	.000	.000	.210	.000
	N	318	318	318	318	318	318	318
C2 Hard Working	Pearson Correlation	-.269**	.196**	.170**	.333**	.183**	.135*	.348**
	Sig. (2-tailed)	.000	.000	.002	.000	.001	.016	.000
	N	318	318	318	318	318	318	318
C3 Organized	Pearson Correlation	-.305**	.125*	.134*	.393**	.119*	.059	.272**
	Sig. (2-tailed)	.000	.026	.017	.000	.034	.294	.000
	N	318	318	318	318	318	318	318
Scores for N_IPIP	Pearson Correlation	.419**	-.201**	-.154**	-.264**	.003	-.091	-.360**
	Sig. (2-tailed)	.000	.000	.007	.000	.962	.109	.000
	N	311	311	311	311	311	311	311
Scores for E_IPIP	Pearson Correlation	-.663**	.168**	.168**	.323**	.041	.036	.482**
	Sig. (2-tailed)	.000	.003	.003	.000	.474	.527	.000
	N	311	311	311	311	311	311	311
Scores for O_IPIP	Pearson Correlation	-.233**	.628**	.538**	.508**	.502**	.357**	.230**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	311	311
Scores for A_IPIP	Pearson Correlation	-.381**	.223**	.143*	.286**	.197**	.093	.535**
	Sig. (2-tailed)	.000	.000	.011	.000	.000	.102	.000
	N	311	311	311	311	311	311	311

Predictor and Criterion Measures - Combined Group

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Scores for C_IPIP	Pearson Correlation	-.330**	.193**	.163**	.309**	.075	.086	.269**
	Sig. (2-tailed)	.000	.001	.004	.000	.189	.130	.000
	N	311	311	311	311	311	311	311
Scores for N_TSD	Pearson Correlation	.474**	-.129*	-.108	-.265**	.064	-.089	-.307**
	Sig. (2-tailed)	.000	.034	.078	.000	.299	.146	.000
	N	268	268	268	268	268	268	268
Scores for E_TSD	Pearson Correlation	-.815**	.134*	.132*	.311**	-.031	.011	.497**
	Sig. (2-tailed)	.000	.026	.029	.000	.603	.851	.000
	N	275	275	275	275	275	275	275
Scores for O_TSD	Pearson Correlation	-.008	.888**	.809**	.502**	.761**	.640**	.146*
	Sig. (2-tailed)	.899	.000	.000	.000	.000	.000	.015
	N	281	281	281	281	281	281	281
Scores for A_TSD	Pearson Correlation	-.472**	.201**	.135*	.352**	.180**	.092	.735**
	Sig. (2-tailed)	.000	.001	.026	.000	.003	.131	.000
	N	271	271	271	271	271	271	271
Scores for C_TSD	Pearson Correlation	-.342**	.168**	.160**	.399**	.183**	.076	.307**
	Sig. (2-tailed)	.000	.005	.008	.000	.002	.207	.000
	N	275	275	275	275	275	275	275
vs_perc	Pearson Correlation	-.016	.109	.033	.072	.054	.124	-.057
	Sig. (2-tailed)	.823	.122	.645	.306	.447	.079	.421
	N	203	203	203	203	203	203	203
sa_perc	Pearson Correlation	.093	-.003	.021	.165*	.056	.036	.046
	Sig. (2-tailed)	.188	.969	.766	.019	.425	.611	.513
	N	203	203	203	203	203	203	203
ps_perc	Pearson Correlation	-.008	.089	.138*	.164*	.073	.024	.024
	Sig. (2-tailed)	.909	.209	.049	.020	.300	.732	.737
	N	203	203	203	203	203	203	203
tot_perc	Pearson Correlation	.007	.081	.107	.200**	.085	.072	.030
	Sig. (2-tailed)	.921	.250	.129	.004	.225	.310	.673
	N	203	203	203	203	203	203	203
gender	Pearson Correlation	.043	.031	.042	-.008	.056	.076	-.010
	Sig. (2-tailed)	.459	.600	.470	.896	.341	.195	.861
	N	295	295	295	295	295	295	295

Predictor and Criterion Measures - Combined Group

Correlations

		e5recode	O1 Philosophical	O2 Scientific Interest	O3 Creative	O4 Reflective	O5 Cultured	A1 Friendly
Birth_Yr	Pearson Correlation	.008	-.092	-.038	.126	.039	-.163*	.042
	Sig. (2-tailed)	.914	.226	.611	.096	.608	.030	.580
	N	177	177	177	177	177	177	177
edulevel	Pearson Correlation	.077	.184	.116	.127	.036	.122	-.186
	Sig. (2-tailed)	.496	.099	.301	.259	.749	.278	.096
	N	81	81	81	81	81	81	81
language	Pearson Correlation	.054	.139	.095	.099	-.045	.016	.021
	Sig. (2-tailed)	.634	.222	.404	.386	.692	.887	.857
	N	79	79	79	79	79	79	79

Predictor and Criterion Measures - Combined Group

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
leader	Pearson Correlation	.077	.045	-.055	-.057	-.184**	-.131	-.135*
	Sig. (2-tailed)	.258	.509	.422	.405	.006	.053	.047
	N	218	217	218	218	218	218	218
insp	Pearson Correlation	.071	.042	-.006	-.037	-.124	-.058	-.068
	Sig. (2-tailed)	.299	.537	.933	.589	.067	.393	.319
	N	218	217	218	218	218	218	218
support	Pearson Correlation	.131	.103	.042	.007	-.135*	-.055	-.096
	Sig. (2-tailed)	.054	.131	.541	.923	.047	.419	.159
	N	218	217	218	218	218	218	218
standard	Pearson Correlation	.137*	.145*	.026	.004	-.077	-.038	-.054
	Sig. (2-tailed)	.043	.032	.698	.954	.256	.579	.424
	N	218	217	218	218	218	218	218
contextual	Pearson Correlation	.111	.080	.020	-.016	-.142*	-.062	-.090
	Sig. (2-tailed)	.101	.240	.766	.814	.036	.362	.185
	N	218	217	218	218	218	218	218
task	Pearson Correlation	.118	.104	-.017	-.030	-.147*	-.095	-.106
	Sig. (2-tailed)	.082	.125	.806	.659	.030	.161	.119
	N	218	217	218	218	218	218	218
total	Pearson Correlation	.120	.095	-.001	-.025	-.153*	-.085	-.104
	Sig. (2-tailed)	.077	.162	.993	.710	.024	.213	.126
	N	218	217	218	218	218	218	218
N1 Nervous and Stressed Out	Pearson Correlation	-.034	-.157**	-.158**	-.082	-.412**	-.395**	-.298**
	Sig. (2-tailed)	.545	.005	.005	.143	.000	.000	.000
	N	318	317	318	318	318	318	318
N2 Worrying	Pearson Correlation	.013	-.221**	-.077	-.097	-.354**	-.260**	-.210**
	Sig. (2-tailed)	.819	.000	.171	.083	.000	.000	.000
	N	318	317	318	318	318	318	318
N3 Irritable	Pearson Correlation	-.284**	-.476**	-.215**	-.259**	-.320**	-.233**	-.188**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001
	N	318	317	318	318	318	318	318
N4 Envious and Jealous	Pearson Correlation	-.247**	-.380**	-.195**	-.275**	-.395**	-.322**	-.251**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	318	317	318	318	318	318	318

Predictor and Criterion Measures - Combined Group

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
E1 Shy and Bashful	Pearson Correlation	-.016	-.302**	-.103	-.152**	-.232**	-.207**	-.195**
	Sig. (2-tailed)	.770	.000	.066	.007	.000	.000	.000
	N	318	317	318	318	318	318	318
E2 Talkative	Pearson Correlation	.236**	.342**	.365**	.423**	.215**	.252**	.198**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	318	317	318	318	318	318	318
E3 Socially Active	Pearson Correlation	.245**	.244**	.390**	.397**	.272**	.377**	.346**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	318	317	318	318	318	318	318
E4 Assertive	Pearson Correlation	.060	-.071	.059	.072	.105	.186**	.071
	Sig. (2-tailed)	.289	.206	.293	.199	.061	.001	.205
	N	318	317	318	318	318	318	318
E5 Unsociable	Pearson Correlation	-.121*	-.410**	-.234**	-.368**	-.367**	-.269**	-.305**
	Sig. (2-tailed)	.031	.000	.000	.000	.000	.000	.000
	N	318	317	318	318	318	318	318
O1 Philosophical	Pearson Correlation	.212**	.079	.140*	.218**	.173**	.196**	.125*
	Sig. (2-tailed)	.000	.162	.013	.000	.002	.000	.026
	N	318	317	318	318	318	318	318
O2 Scientific Interest	Pearson Correlation	.189**	.009	.133*	.143*	.148**	.170**	.134*
	Sig. (2-tailed)	.001	.871	.018	.011	.008	.002	.017
	N	318	317	318	318	318	318	318
O3 Creative	Pearson Correlation	.161**	.170**	.273**	.336**	.444**	.333**	.393**
	Sig. (2-tailed)	.004	.002	.000	.000	.000	.000	.000
	N	318	317	318	318	318	318	318
O4 Reflective	Pearson Correlation	.164**	.034	.196**	.242**	.202**	.183**	.119*
	Sig. (2-tailed)	.003	.549	.000	.000	.000	.001	.034
	N	318	317	318	318	318	318	318
O5 Cultured	Pearson Correlation	.120*	.006	.089	.104	.071	.135*	.059
	Sig. (2-tailed)	.033	.912	.113	.065	.210	.016	.294
	N	318	317	318	318	318	318	318
A1 Friendly	Pearson Correlation	.546**	.415**	.495**	.529**	.287**	.348**	.272**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	318	317	318	318	318	318	318

Predictor and Criterion Measures - Combined Group

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
A2 Considerate	Pearson Correlation	1	.439**	.552**	.551**	.139*	.281**	.150**
	Sig. (2-tailed)		.000	.000	.000	.013	.000	.007
	N	318	317	318	318	318	318	318
A3 Cold and Insensitive	Pearson Correlation	.439**	1	.386**	.585**	.218**	.156**	.142*
	Sig. (2-tailed)	.000		.000	.000	.000	.005	.011
	N	317	317	317	317	317	317	317
A4 Helpful	Pearson Correlation	.552**	.386**	1	.572**	.282**	.343**	.274**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	318	317	318	318	318	318	318
A5 Warm and Sympathetic	Pearson Correlation	.551**	.585**	.572**	1	.474**	.287**	.337**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	318	317	318	318	318	318	318
C1 Efficient and Dependable	Pearson Correlation	.139*	.218**	.282**	.474**	1	.573**	.661**
	Sig. (2-tailed)	.013	.000	.000	.000		.000	.000
	N	318	317	318	318	318	318	318
C2 Hard Working	Pearson Correlation	.281**	.156**	.343**	.287**	.573**	1	.624**
	Sig. (2-tailed)	.000	.005	.000	.000	.000		.000
	N	318	317	318	318	318	318	318
C3 Organized	Pearson Correlation	.150**	.142*	.274**	.337**	.661**	.624**	1
	Sig. (2-tailed)	.007	.011	.000	.000	.000	.000	
	N	318	317	318	318	318	318	318
Scores for N_IPIP	Pearson Correlation	-.149**	-.245**	-.143*	-.119*	-.337**	-.302**	-.226**
	Sig. (2-tailed)	.009	.000	.011	.035	.000	.000	.000
	N	311	310	311	311	311	311	311
Scores for E_IPIP	Pearson Correlation	.191**	.306**	.322**	.321**	.225**	.297**	.257**
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000	.000
	N	311	310	311	311	311	311	311
Scores for O_IPIP	Pearson Correlation	.137*	.172**	.209**	.190**	.278**	.208**	.147**
	Sig. (2-tailed)	.016	.002	.000	.001	.000	.000	.009
	N	311	310	311	311	311	311	311
Scores for A_IPIP	Pearson Correlation	.604**	.550**	.592**	.617**	.192**	.297**	.188**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.001
	N	311	310	311	311	311	311	311

Predictor and Criterion Measures - Combined Group

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Scores for C_IPIP	Pearson Correlation	.202**	.196**	.218**	.227**	.571**	.649**	.728**
	Sig. (2-tailed)	.000	.001	.000	.000	.000	.000	.000
	N	311	310	311	311	311	311	311
Scores for N_TSD	Pearson Correlation	-.144*	-.309**	-.161**	-.166**	-.416**	-.335**	-.267**
	Sig. (2-tailed)	.019	.000	.008	.006	.000	.000	.000
	N	268	268	268	268	268	268	268
Scores for E_TSD	Pearson Correlation	.177**	.401**	.320**	.339**	.345**	.347**	.302**
	Sig. (2-tailed)	.003	.000	.000	.000	.000	.000	.000
	N	275	275	275	275	275	275	275
Scores for O_TSD	Pearson Correlation	.246**	.080	.170**	.259**	.216**	.239**	.164**
	Sig. (2-tailed)	.000	.180	.004	.000	.000	.000	.006
	N	281	281	281	281	281	281	281
Scores for A_TSD	Pearson Correlation	.743**	.779**	.686**	.867**	.399**	.352**	.292**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	271	271	271	271	271	271	271
Scores for C_TSD	Pearson Correlation	.204**	.220**	.311**	.456**	.900**	.801**	.892**
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.000	.000
	N	275	275	275	275	275	275	275
vs_perc	Pearson Correlation	-.028	-.046	.016	-.063	-.037	.026	.024
	Sig. (2-tailed)	.694	.516	.821	.369	.601	.715	.739
	N	203	202	203	203	203	203	203
sa_perc	Pearson Correlation	.029	-.031	-.020	.000	.065	.068	.045
	Sig. (2-tailed)	.685	.664	.776	1.000	.360	.337	.525
	N	203	202	203	203	203	203	203
ps_perc	Pearson Correlation	.000	-.061	-.021	.051	.041	-.013	.039
	Sig. (2-tailed)	.995	.385	.770	.468	.557	.851	.585
	N	203	202	203	203	203	203	203
tot_perc	Pearson Correlation	.008	-.036	.012	.016	.057	.027	.051
	Sig. (2-tailed)	.915	.607	.866	.826	.422	.703	.470
	N	203	202	203	203	203	203	203
gender	Pearson Correlation	.071	-.043	.033	-.059	-.086	-.051	-.046
	Sig. (2-tailed)	.226	.463	.576	.312	.140	.387	.428
	N	295	294	295	295	295	295	295

Predictor and Criterion Measures - Combined Group

Correlations

		A2 Considerate	A3 Cold and Insensitive	A4 Helpful	A5 Warm and Sympathetic	C1 Efficient and Dependable	C2 Hard Working	C3 Organized
Birth_Yr	Pearson Correlation	.005	.031	.126	.043	.036	.026	.087
	Sig. (2-tailed)	.946	.682	.095	.573	.637	.729	.249
	N	177	177	177	177	177	177	177
edulevel	Pearson Correlation	.082	.003	-.046	-.026	-.101	-.035	-.103
	Sig. (2-tailed)	.466	.978	.684	.819	.368	.753	.359
	N	81	81	81	81	81	81	81
language	Pearson Correlation	.053	.214	-.013	.108	-.120	.077	.014
	Sig. (2-tailed)	.643	.059	.908	.343	.293	.502	.901
	N	79	79	79	79	79	79	79

Predictor and Criterion Measures - Combined Group

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
leader	Pearson Correlation	-.023	.133	.007	.051	-.069	.035	.115
	Sig. (2-tailed)	.735	.052	.921	.461	.318	.635	.111
	N	214	214	214	214	214	188	192
insp	Pearson Correlation	.016	.085	.025	.018	-.091	.010	.094
	Sig. (2-tailed)	.816	.213	.718	.789	.186	.887	.196
	N	214	214	214	214	214	188	192
support	Pearson Correlation	-.013	.088	-.002	.091	-.078	.027	.052
	Sig. (2-tailed)	.855	.198	.982	.185	.255	.714	.476
	N	214	214	214	214	214	188	192
standard	Pearson Correlation	-.065	.073	.000	.072	.001	-.002	.033
	Sig. (2-tailed)	.342	.285	.998	.293	.990	.981	.650
	N	214	214	214	214	214	188	192
contextual	Pearson Correlation	.001	.096	.012	.061	-.093	.021	.078
	Sig. (2-tailed)	.983	.164	.857	.374	.177	.779	.283
	N	214	214	214	214	214	188	192
task	Pearson Correlation	-.049	.116	.004	.068	-.038	.018	.083
	Sig. (2-tailed)	.479	.092	.954	.323	.576	.802	.253
	N	214	214	214	214	214	188	192
total	Pearson Correlation	-.022	.111	.005	.065	-.069	.024	.085
	Sig. (2-tailed)	.753	.107	.937	.342	.315	.744	.243
	N	214	214	214	214	214	188	192
N1 Nervous and Stressed Out	Pearson Correlation	.723**	-.374**	-.274**	-.106	-.450**	.913**	-.485**
	Sig. (2-tailed)	.000	.000	.000	.061	.000	.000	.000
	N	311	311	311	311	311	268	275
N2 Worrying	Pearson Correlation	.736**	-.348**	-.271**	-.094	-.342**	.880**	-.532**
	Sig. (2-tailed)	.000	.000	.000	.099	.000	.000	.000
	N	311	311	311	311	311	268	275
N3 Irritable	Pearson Correlation	.663**	-.258**	-.252**	-.290**	-.328**	.797**	-.442**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275
N4 Envious and Jealous	Pearson Correlation	.545**	-.268**	-.244**	-.250**	-.356**	.748**	-.449**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275

Predictor and Criterion Measures - Combined Group

Correlations

		nipiptransf ormed	Scores for E IPIP	Scores for O IPIP	Scores for A IPIP	Scores for C IPIP	Scores for N TSD	Scores for E TSD
E1 Shy and Bashful	Pearson Correlation	.465**	-.710**	-.309**	-.221**	-.279**	.554**	-.898**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275
E2 Talkative	Pearson Correlation	-.214**	.720**	.235**	.450**	.212**	-.183**	.752**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.003	.000
	N	311	311	311	311	311	268	275
E3 Socially Active	Pearson Correlation	-.293**	.712**	.201**	.431**	.301**	-.270**	.734**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275
E4 Assertive	Pearson Correlation	-.141*	.215**	.314**	.148**	.111	-.095	.156**
	Sig. (2-tailed)	.013	.000	.000	.009	.051	.120	.009
	N	311	311	311	311	311	268	275
E5 Unsociable	Pearson Correlation	.419**	-.663**	-.233**	-.381**	-.330**	.474**	-.815**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275
O1 Philosophical	Pearson Correlation	-.201**	.168**	.628**	.223**	.193**	-.129*	.134*
	Sig. (2-tailed)	.000	.003	.000	.000	.001	.034	.026
	N	311	311	311	311	311	268	275
O2 Scientific Interest	Pearson Correlation	-.154**	.168**	.538**	.143*	.163**	-.108	.132*
	Sig. (2-tailed)	.007	.003	.000	.011	.004	.078	.029
	N	311	311	311	311	311	268	275
O3 Creative	Pearson Correlation	-.264**	.323**	.508**	.286**	.309**	-.265**	.311**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275
O4 Reflective	Pearson Correlation	.003	.041	.502**	.197**	.075	.064	-.031
	Sig. (2-tailed)	.962	.474	.000	.000	.189	.299	.603
	N	311	311	311	311	311	268	275
O5 Cultured	Pearson Correlation	-.091	.036	.357**	.093	.086	-.089	.011
	Sig. (2-tailed)	.109	.527	.000	.102	.130	.146	.851
	N	311	311	311	311	311	268	275
A1 Friendly	Pearson Correlation	-.360**	.482**	.230**	.535**	.269**	-.307**	.497**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275

Predictor and Criterion Measures - Combined Group

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
A2 Considerate	Pearson Correlation	-.149**	.191**	.137*	.604**	.202**	-.144*	.177**
	Sig. (2-tailed)	.009	.001	.016	.000	.000	.019	.003
	N	311	311	311	311	311	268	275
A3 Cold and Insensitive	Pearson Correlation	-.245**	.306**	.172**	.550**	.196**	-.309**	.401**
	Sig. (2-tailed)	.000	.000	.002	.000	.001	.000	.000
	N	310	310	310	310	310	268	275
A4 Helpful	Pearson Correlation	-.143*	.322**	.209**	.592**	.218**	-.161**	.320**
	Sig. (2-tailed)	.011	.000	.000	.000	.000	.008	.000
	N	311	311	311	311	311	268	275
A5 Warm and Sympathetic	Pearson Correlation	-.119*	.321**	.190**	.617**	.227**	-.166**	.339**
	Sig. (2-tailed)	.035	.000	.001	.000	.000	.006	.000
	N	311	311	311	311	311	268	275
C1 Efficient and Dependable	Pearson Correlation	-.337**	.225**	.278**	.192**	.571**	-.416**	.345**
	Sig. (2-tailed)	.000	.000	.000	.001	.000	.000	.000
	N	311	311	311	311	311	268	275
C2 Hard Working	Pearson Correlation	-.302**	.297**	.208**	.297**	.649**	-.335**	.347**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	268	275
C3 Organized	Pearson Correlation	-.226**	.257**	.147**	.188**	.728**	-.267**	.302**
	Sig. (2-tailed)	.000	.000	.009	.001	.000	.000	.000
	N	311	311	311	311	311	268	275
Scores for N_IPIP	Pearson Correlation	1	-.388**	-.338**	-.230**	-.438**	.809**	-.492**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	311	311	311	311	311	263	270
Scores for E_IPIP	Pearson Correlation	-.388**	1	.361**	.473**	.305**	-.344**	.860**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	311	311	311	311	311	263	270
Scores for O_IPIP	Pearson Correlation	-.338**	.361**	1	.292**	.284**	-.237**	.332**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	311	311	311	311	311	263	270
Scores for A_IPIP	Pearson Correlation	-.230**	.473**	.292**	1	.342**	-.153*	.404**
	Sig. (2-tailed)	.000	.000	.000		.000	.013	.000
	N	311	311	311	311	311	263	270

Predictor and Criterion Measures - Combined Group

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Scores for C_IPIP	Pearson Correlation	-.438**	.305**	.284**	.342**	1	-.426**	.360**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	311	311	311	311	311	263	270
Scores for N_TSD	Pearson Correlation	.809**	-.344**	-.237**	-.153*	-.426**	1	-.536**
	Sig. (2-tailed)	.000	.000	.000	.013	.000		.000
	N	263	263	263	263	263	268	245
Scores for E_TSD	Pearson Correlation	-.492**	.860**	.332**	.404**	.360**	-.536**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	270	270	270	270	270	245	275
Scores for O_TSD	Pearson Correlation	-.159**	.164**	.685**	.244**	.192**	-.111	.125*
	Sig. (2-tailed)	.008	.006	.000	.000	.001	.081	.047
	N	277	277	277	277	277	249	255
Scores for A_TSD	Pearson Correlation	-.282**	.449**	.203**	.753**	.288**	-.314**	.484**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.000
	N	266	266	266	266	266	244	245
Scores for C_TSD	Pearson Correlation	-.308**	.268**	.190**	.217**	.734**	-.415**	.355**
	Sig. (2-tailed)	.000	.000	.002	.000	.000	.000	.000
	N	270	270	270	270	270	243	251
vs_perc	Pearson Correlation	-.012	.020	.076	.044	.023	.095	-.028
	Sig. (2-tailed)	.870	.778	.281	.536	.750	.220	.708
	N	201	201	201	201	201	170	177
sa_perc	Pearson Correlation	-.006	-.037	.013	-.058	-.031	.029	-.017
	Sig. (2-tailed)	.933	.601	.855	.415	.664	.709	.824
	N	201	201	201	201	201	170	177
ps_perc	Pearson Correlation	.024	.035	.097	-.012	.003	.003	.004
	Sig. (2-tailed)	.730	.623	.171	.862	.966	.968	.961
	N	201	201	201	201	201	170	177
tot_perc	Pearson Correlation	.006	.015	.105	.004	-.001	.027	-.006
	Sig. (2-tailed)	.936	.830	.137	.959	.991	.723	.937
	N	201	201	201	201	201	170	177
gender	Pearson Correlation	-.031	-.048	.018	.056	-.044	.025	-.032
	Sig. (2-tailed)	.604	.417	.755	.340	.454	.696	.605
	N	288	288	288	288	288	251	259

Predictor and Criterion Measures - Combined Group

Correlations

		nipiptransf ormed	Scores for E_IPIP	Scores for O_IPIP	Scores for A_IPIP	Scores for C_IPIP	Scores for N_TSD	Scores for E_TSD
Birth_Yr	Pearson Correlation	-.011	-.001	.023	.020	.032	.011	-.058
	Sig. (2-tailed)	.885	.986	.764	.794	.676	.888	.470
	N	170	170	170	170	170	156	157
edulevel	Pearson Correlation	.028	.008	.222*	.069	-.041	.074	-.053
	Sig. (2-tailed)	.804	.942	.048	.541	.721	.532	.664
	N	80	80	80	80	80	73	69
language	Pearson Correlation	.004	.189	.001	.157	.075	.029	.142
	Sig. (2-tailed)	.972	.102	.990	.177	.519	.808	.251
	N	76	76	76	76	76	72	67

Predictor and Criterion Measures - Combined Group

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
leader	Pearson Correlation	-.061	.016	-.201**	.122	.174	.265**	.258**	-.146*
	Sig. (2-tailed)	.398	.823	.005	.176	.053	.003	.004	.036
	N	194	191	194	124	124	124	124	207
insp	Pearson Correlation	-.007	.015	-.130	.034	.038	.185*	.146	-.031
	Sig. (2-tailed)	.927	.836	.070	.705	.673	.039	.105	.654
	N	194	191	194	124	124	124	124	207
support	Pearson Correlation	-.017	.043	-.173*	.143	.176	.212*	.211*	-.068
	Sig. (2-tailed)	.817	.558	.016	.114	.051	.018	.019	.330
	N	194	191	194	124	124	124	124	207
standard	Pearson Correlation	-.009	.080	-.088	.136	.144	.125	.150	-.097
	Sig. (2-tailed)	.905	.269	.225	.131	.110	.167	.096	.166
	N	194	191	194	124	124	124	124	207
contextual	Pearson Correlation	-.013	.032	-.167*	.102	.123	.225*	.203*	-.055
	Sig. (2-tailed)	.859	.663	.020	.260	.173	.012	.024	.430
	N	194	191	194	124	124	124	124	207
task	Pearson Correlation	-.039	.052	-.161*	.150	.186*	.230*	.239**	-.136
	Sig. (2-tailed)	.590	.472	.025	.096	.039	.010	.007	.051
	N	194	191	194	124	124	124	124	207
total	Pearson Correlation	-.031	.042	-.173*	.130	.169	.240**	.234**	-.100
	Sig. (2-tailed)	.668	.565	.016	.149	.061	.007	.009	.153
	N	194	191	194	124	124	124	124	207
N1 Nervous and Stressed Out	Pearson Correlation	-.085	-.204**	-.420**	-.001	.067	.021	.020	.027
	Sig. (2-tailed)	.155	.001	.000	.984	.342	.766	.772	.645
	N	281	271	275	203	203	203	203	295
N2 Worrying	Pearson Correlation	-.050	-.195**	-.307**	.074	.028	.010	.022	-.005
	Sig. (2-tailed)	.400	.001	.000	.293	.692	.891	.753	.931
	N	281	271	275	203	203	203	203	295
N3 Irritable	Pearson Correlation	-.135*	-.469**	-.299**	.048	.043	.037	.035	-.063
	Sig. (2-tailed)	.023	.000	.000	.494	.539	.603	.622	.281
	N	281	271	275	203	203	203	203	295
N4 Envious and Jealous	Pearson Correlation	-.171**	-.398**	-.385**	.042	-.048	-.041	-.045	.026
	Sig. (2-tailed)	.004	.000	.000	.553	.493	.559	.521	.662
	N	281	271	275	203	203	203	203	295

Predictor and Criterion Measures - Combined Group

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
E1 Shy and Bashful	Pearson Correlation	-.083	-.274**	-.246**	.037	.038	-.007	.009	.057
	Sig. (2-tailed)	.166	.000	.000	.600	.593	.917	.903	.326
	N	281	271	275	203	203	203	203	295
E2 Talkative	Pearson Correlation	.157**	.499**	.259**	.036	.009	.022	.034	-.093
	Sig. (2-tailed)	.008	.000	.000	.607	.897	.752	.630	.109
	N	281	271	275	203	203	203	203	295
E3 Socially Active	Pearson Correlation	.111	.478**	.320**	-.019	.020	.024	.016	.000
	Sig. (2-tailed)	.063	.000	.000	.786	.779	.735	.819	.996
	N	281	271	275	203	203	203	203	295
E4 Assertive	Pearson Correlation	.503**	.070	.154*	.078	.054	.087	.065	.034
	Sig. (2-tailed)	.000	.248	.011	.266	.445	.220	.358	.566
	N	281	271	275	203	203	203	203	295
E5 Unsociable	Pearson Correlation	-.008	-.472**	-.342**	-.016	.093	-.008	.007	.043
	Sig. (2-tailed)	.899	.000	.000	.823	.188	.909	.921	.459
	N	281	271	275	203	203	203	203	295
O1 Philosophical	Pearson Correlation	.888**	.201**	.168**	.109	-.003	.089	.081	.031
	Sig. (2-tailed)	.000	.001	.005	.122	.969	.209	.250	.600
	N	281	271	275	203	203	203	203	295
O2 Scientific Interest	Pearson Correlation	.809**	.135*	.160**	.033	.021	.138*	.107	.042
	Sig. (2-tailed)	.000	.026	.008	.645	.766	.049	.129	.470
	N	281	271	275	203	203	203	203	295
O3 Creative	Pearson Correlation	.502**	.352**	.399**	.072	.165*	.164*	.200**	-.008
	Sig. (2-tailed)	.000	.000	.000	.306	.019	.020	.004	.896
	N	281	271	275	203	203	203	203	295
O4 Reflective	Pearson Correlation	.761**	.180**	.183**	.054	.056	.073	.085	.056
	Sig. (2-tailed)	.000	.003	.002	.447	.425	.300	.225	.341
	N	281	271	275	203	203	203	203	295
O5 Cultured	Pearson Correlation	.640**	.092	.076	.124	.036	.024	.072	.076
	Sig. (2-tailed)	.000	.131	.207	.079	.611	.732	.310	.195
	N	281	271	275	203	203	203	203	295
A1 Friendly	Pearson Correlation	.146*	.735**	.307**	-.057	.046	.024	.030	-.010
	Sig. (2-tailed)	.015	.000	.000	.421	.513	.737	.673	.861
	N	281	271	275	203	203	203	203	295

Predictor and Criterion Measures - Combined Group

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
A2 Considerate	Pearson Correlation	.246**	.743**	.204**	-.028	.029	.000	.008	.071
	Sig. (2-tailed)	.000	.000	.001	.694	.685	.995	.915	.226
	N	281	271	275	203	203	203	203	295
A3 Cold and Insensitive	Pearson Correlation	.080	.779**	.220**	-.046	-.031	-.061	-.036	-.043
	Sig. (2-tailed)	.180	.000	.000	.516	.664	.385	.607	.463
	N	281	271	275	202	202	202	202	294
A4 Helpful	Pearson Correlation	.170**	.686**	.311**	.016	-.020	-.021	.012	.033
	Sig. (2-tailed)	.004	.000	.000	.821	.776	.770	.866	.576
	N	281	271	275	203	203	203	203	295
A5 Warm and Sympathetic	Pearson Correlation	.259**	.867**	.456**	-.063	.000	.051	.016	-.059
	Sig. (2-tailed)	.000	.000	.000	.369	1.000	.468	.826	.312
	N	281	271	275	203	203	203	203	295
C1 Efficient and Dependable	Pearson Correlation	.216**	.399**	.900**	-.037	.065	.041	.057	-.086
	Sig. (2-tailed)	.000	.000	.000	.601	.360	.557	.422	.140
	N	281	271	275	203	203	203	203	295
C2 Hard Working	Pearson Correlation	.239**	.352**	.801**	.026	.068	-.013	.027	-.051
	Sig. (2-tailed)	.000	.000	.000	.715	.337	.851	.703	.387
	N	281	271	275	203	203	203	203	295
C3 Organized	Pearson Correlation	.164**	.292**	.892**	.024	.045	.039	.051	-.046
	Sig. (2-tailed)	.006	.000	.000	.739	.525	.585	.470	.428
	N	281	271	275	203	203	203	203	295
Scores for N_IPIP	Pearson Correlation	-.159**	-.282**	-.308**	-.012	-.006	.024	.006	-.031
	Sig. (2-tailed)	.008	.000	.000	.870	.933	.730	.936	.604
	N	277	266	270	201	201	201	201	288
Scores for E_IPIP	Pearson Correlation	.164**	.449**	.268**	.020	-.037	.035	.015	-.048
	Sig. (2-tailed)	.006	.000	.000	.778	.601	.623	.830	.417
	N	277	266	270	201	201	201	201	288
Scores for O_IPIP	Pearson Correlation	.685**	.203**	.190**	.076	.013	.097	.105	.018
	Sig. (2-tailed)	.000	.001	.002	.281	.855	.171	.137	.755
	N	277	266	270	201	201	201	201	288
Scores for A_IPIP	Pearson Correlation	.244**	.753**	.217**	.044	-.058	-.012	.004	.056
	Sig. (2-tailed)	.000	.000	.000	.536	.415	.862	.959	.340
	N	277	266	270	201	201	201	201	288

Predictor and Criterion Measures - Combined Group

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Scores for C_IPIP	Pearson Correlation	.192**	.288**	.734**	.023	-.031	.003	-.001	-.044
	Sig. (2-tailed)	.001	.000	.000	.750	.664	.966	.991	.454
	N	277	266	270	201	201	201	201	288
Scores for N_TSD	Pearson Correlation	-.111	-.314**	-.415**	.095	.029	.003	.027	.025
	Sig. (2-tailed)	.081	.000	.000	.220	.709	.968	.723	.696
	N	249	244	243	170	170	170	170	251
Scores for E_TSD	Pearson Correlation	.125*	.484**	.355**	-.028	-.017	.004	-.006	-.032
	Sig. (2-tailed)	.047	.000	.000	.708	.824	.961	.937	.605
	N	255	245	251	177	177	177	177	259
Scores for O_TSD	Pearson Correlation	1	.232**	.233**	.090	.071	.137	.137	.095
	Sig. (2-tailed)		.000	.000	.236	.346	.068	.068	.124
	N	281	251	253	177	177	177	177	262
Scores for A_TSD	Pearson Correlation	.232**	1	.417**	-.039	.008	.013	.017	.006
	Sig. (2-tailed)	.000		.000	.613	.919	.869	.830	.930
	N	251	271	247	171	171	171	171	254
Scores for C_TSD	Pearson Correlation	.233**	.417**	1	-.049	.042	.021	.025	-.082
	Sig. (2-tailed)	.000	.000		.524	.582	.782	.745	.189
	N	253	247	275	173	173	173	173	256
vs_perc	Pearson Correlation	.090	-.039	-.049	1	.282**	.276**	.578**	-.085
	Sig. (2-tailed)	.236	.613	.524		.000	.000	.000	.227
	N	177	171	173	203	203	203	203	203
sa_perc	Pearson Correlation	.071	.008	.042	.282**	1	.477**	.709**	-.122
	Sig. (2-tailed)	.346	.919	.582	.000		.000	.000	.082
	N	177	171	173	203	203	203	203	203
ps_perc	Pearson Correlation	.137	.013	.021	.276**	.477**	1	.877**	-.135
	Sig. (2-tailed)	.068	.869	.782	.000	.000		.000	.055
	N	177	171	173	203	203	203	203	203
tot_perc	Pearson Correlation	.137	.017	.025	.578**	.709**	.877**	1	-.147*
	Sig. (2-tailed)	.068	.830	.745	.000	.000	.000		.036
	N	177	171	173	203	203	203	203	203
gender	Pearson Correlation	.095	.006	-.082	-.085	-.122	-.135	-.147*	1
	Sig. (2-tailed)	.124	.930	.189	.227	.082	.055	.036	
	N	262	254	256	203	203	203	203	295

Predictor and Criterion Measures - Combined Group

Correlations

		Scores for O_TSD	Scores for A_TSD	Scores for C_TSD	vs_perc	sa_perc	ps_perc	tot_perc	gender
Birth_Yr	Pearson Correlation	-.022	.038	.062	.048	.268*	.133	.203	-.089
	Sig. (2-tailed)	.783	.638	.439	.660	.013	.223	.062	.236
	N	162	155	159	85	85	85	85	177
edulevel	Pearson Correlation	.131	-.013	-.107	.154	.162	.197	.216	.038
	Sig. (2-tailed)	.280	.915	.366	.199	.178	.100	.070	.737
	N	70	70	74	71	71	71	71	80
language	Pearson Correlation	.102	.140	-.033	.129	-.048	.051	.078	.103
	Sig. (2-tailed)	.396	.257	.787	.340	.722	.704	.565	.365
	N	71	67	71	57	57	57	57	79

Predictor and Criterion Measures - Combined Group

Correlations

		Birth_Yr	edulevel	language
leader	Pearson Correlation	-.180*	.292*	.288*
	Sig. (2-tailed)	.030	.029	.027
	N	146	56	59
insp	Pearson Correlation	-.211*	.276*	.121
	Sig. (2-tailed)	.011	.039	.362
	N	146	56	59
support	Pearson Correlation	-.098	.350**	.166
	Sig. (2-tailed)	.239	.008	.209
	N	146	56	59
standard	Pearson Correlation	-.162	.452**	-.111
	Sig. (2-tailed)	.051	.000	.401
	N	146	56	59
contextual	Pearson Correlation	-.168*	.366**	.162
	Sig. (2-tailed)	.042	.006	.221
	N	146	56	59
task	Pearson Correlation	-.188*	.447**	.108
	Sig. (2-tailed)	.023	.001	.415
	N	146	56	59
total	Pearson Correlation	-.191*	.432**	.138
	Sig. (2-tailed)	.021	.001	.297
	N	146	56	59
N1 Nervous and Stressed Out	Pearson Correlation	-.017	.066	.011
	Sig. (2-tailed)	.818	.558	.922
	N	177	81	79
N2 Worrying	Pearson Correlation	.000	.105	.071
	Sig. (2-tailed)	.996	.349	.536
	N	177	81	79
N3 Irritable	Pearson Correlation	.044	.101	.041
	Sig. (2-tailed)	.562	.371	.722
	N	177	81	79
N4 Envious and Jealous	Pearson Correlation	.139	-.083	-.063
	Sig. (2-tailed)	.066	.462	.580
	N	177	81	79

Predictor and Criterion Measures - Combined Group

Correlations

		Birth_Yr	edulevel	language
E1 Shy and Bashful	Pearson Correlation	.115	.043	-.196
	Sig. (2-tailed)	.126	.701	.084
	N	177	81	79
E2 Talkative	Pearson Correlation	.077	-.126	.221*
	Sig. (2-tailed)	.309	.264	.050
	N	177	81	79
E3 Socially Active	Pearson Correlation	.081	-.117	.020
	Sig. (2-tailed)	.284	.297	.861
	N	177	81	79
E4 Assertive	Pearson Correlation	-.088	.189	-.094
	Sig. (2-tailed)	.243	.091	.408
	N	177	81	79
E5 Unsociable	Pearson Correlation	.008	.077	.054
	Sig. (2-tailed)	.914	.496	.634
	N	177	81	79
O1 Philosophical	Pearson Correlation	-.092	.184	.139
	Sig. (2-tailed)	.226	.099	.222
	N	177	81	79
O2 Scientific Interest	Pearson Correlation	-.038	.116	.095
	Sig. (2-tailed)	.611	.301	.404
	N	177	81	79
O3 Creative	Pearson Correlation	.126	.127	.099
	Sig. (2-tailed)	.096	.259	.386
	N	177	81	79
O4 Reflective	Pearson Correlation	.039	.036	-.045
	Sig. (2-tailed)	.608	.749	.692
	N	177	81	79
O5 Cultured	Pearson Correlation	-.163*	.122	.016
	Sig. (2-tailed)	.030	.278	.887
	N	177	81	79
A1 Friendly	Pearson Correlation	.042	-.186	.021
	Sig. (2-tailed)	.580	.096	.857
	N	177	81	79

Predictor and Criterion Measures - Combined Group

Correlations

		Birth_Yr	edulevel	language
A2 Considerate	Pearson Correlation	.005	.082	.053
	Sig. (2-tailed)	.946	.466	.643
	N	177	81	79
A3 Cold and Insensitive	Pearson Correlation	.031	.003	.214
	Sig. (2-tailed)	.682	.978	.059
	N	177	81	79
A4 Helpful	Pearson Correlation	.126	-.046	-.013
	Sig. (2-tailed)	.095	.684	.908
	N	177	81	79
A5 Warm and Sympathetic	Pearson Correlation	.043	-.026	.108
	Sig. (2-tailed)	.573	.819	.343
	N	177	81	79
C1 Efficient and Dependable	Pearson Correlation	.036	-.101	-.120
	Sig. (2-tailed)	.637	.368	.293
	N	177	81	79
C2 Hard Working	Pearson Correlation	.026	-.035	.077
	Sig. (2-tailed)	.729	.753	.502
	N	177	81	79
C3 Organized	Pearson Correlation	.087	-.103	.014
	Sig. (2-tailed)	.249	.359	.901
	N	177	81	79
Scores for N_IPIP	Pearson Correlation	-.011	.028	.004
	Sig. (2-tailed)	.885	.804	.972
	N	170	80	76
Scores for E_IPIP	Pearson Correlation	-.001	.008	.189
	Sig. (2-tailed)	.986	.942	.102
	N	170	80	76
Scores for O_IPIP	Pearson Correlation	.023	.222*	.001
	Sig. (2-tailed)	.764	.048	.990
	N	170	80	76
Scores for A_IPIP	Pearson Correlation	.020	.069	.157
	Sig. (2-tailed)	.794	.541	.177
	N	170	80	76

Predictor and Criterion Measures - Combined Group

Correlations

		Birth_Yr	edulevel	language
Scores for C_IPIP	Pearson Correlation	.032	-.041	.075
	Sig. (2-tailed)	.676	.721	.519
	N	170	80	76
Scores for N_TSD	Pearson Correlation	.011	.074	.029
	Sig. (2-tailed)	.888	.532	.808
	N	156	73	72
Scores for E_TSD	Pearson Correlation	-.058	-.053	.142
	Sig. (2-tailed)	.470	.664	.251
	N	157	69	67
Scores for O_TSD	Pearson Correlation	-.022	.131	.102
	Sig. (2-tailed)	.783	.280	.396
	N	162	70	71
Scores for A_TSD	Pearson Correlation	.038	-.013	.140
	Sig. (2-tailed)	.638	.915	.257
	N	155	70	67
Scores for C_TSD	Pearson Correlation	.062	-.107	-.033
	Sig. (2-tailed)	.439	.366	.787
	N	159	74	71
vs_perc	Pearson Correlation	.048	.154	.129
	Sig. (2-tailed)	.660	.199	.340
	N	85	71	57
sa_perc	Pearson Correlation	.268*	.162	-.048
	Sig. (2-tailed)	.013	.178	.722
	N	85	71	57
ps_perc	Pearson Correlation	.133	.197	.051
	Sig. (2-tailed)	.223	.100	.704
	N	85	71	57
tot_perc	Pearson Correlation	.203	.216	.078
	Sig. (2-tailed)	.062	.070	.565
	N	85	71	57
gender	Pearson Correlation	-.089	.038	.103
	Sig. (2-tailed)	.236	.737	.365
	N	177	80	79

Predictor and Criterion Measures - Combined Group

Correlations

		Birth_Yr	edulevel	language
Birth_Yr	Pearson Correlation	1	.287*	-.106
	Sig. (2-tailed)		.025	.350
	N	177	61	79
edulevel	Pearson Correlation	.287*	1	.005
	Sig. (2-tailed)	.025		.968
	N	61	81	58
language	Pearson Correlation	-.106	.005	1
	Sig. (2-tailed)	.350	.968	
	N	79	58	79

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix D

Comparison of Leadership Performance Scores by Group

Appendix D

Comparison of Leadership Performance Scores by Group

Groups		leader	inspire	support	standard	contextual	task	total
Officers (N=110)	Mean	2.85	3.01	3.11	2.94	6.1182	5.7909	11.92
	S.D.	.907	.796	.828	.870	1.41895	1.45322	2.669
Non- Officers (N=108)	Mean	3.93	3.81	3.87	3.79	7.6759	7.7130	15.40
	S.D.	.770	.779	.855	.832	1.47774	1.48545	2.798
Total (N=218)	Mean	3.39	3.40	3.49	3.36	6.8899	6.7431	13.64
	S.D.	.997	.881	.922	.951	1.64241	1.75401	3.237

ANOVA

			Sum of Squares	df	Mean Square	F	Sig.
leader * GroupsFinal	Between Groups	(Combined)	62.553	1	62.553	88.264	.000
	Within Groups		153.080	216	.709		
	Total		215.633	217			
insp * GroupsFinal	Between Groups	(Combined)	34.569	1	34.569	55.762	.000
	Within Groups		133.908	216	.620		
	Total		168.477	217			
support * GroupsFinal	Between Groups	(Combined)	31.583	1	31.583	44.623	.000
	Within Groups		152.876	216	.708		
	Total		184.459	217			
standard * GroupsFinal	Between Groups	(Combined)	39.435	1	39.435	54.374	.000
	Within Groups		156.656	216	.725		
	Total		196.092	217			
contextual * GroupsFinal	Between Groups	(Combined)	132.237	1	132.237	63.036	.000
	Within Groups		453.121	216	2.098		
	Total		585.358	217			
task * GroupsFinal	Between Groups	(Combined)	201.322	1	201.322	93.258	.000
	Within Groups		466.293	216	2.159		
	Total		667.615	217			
total * GroupsFinal	Between Groups	(Combined)	659.948	1	659.948	88.312	.000
	Within Groups		1614.143	216	7.473		
	Total		2274.092	217			

Appendix E

Trait Self-Descriptive Personality Inventory

Appendix E**TRAIT SELF-DESCRIPTIVE
PERSONALITY INVENTORY**

**THIS IS AN OFFICIAL DOCUMENT OF THE DEPARTMENT OF
NATIONAL DEFENCE OF CANADA**

“THIS PUBLICATION CONTAINS SENSITIVE INFORMATION WHICH SHALL BE PROTECTED IN ACCORDANCE WITH REGULATIONS PRESCRIBED FOR THE SECURITY DESIGNATION APPEARING HEREON. RELEASE OF OR ACCESS TO THIS INFORMATION IS SUBJECT TO THE PROVISIONS OF THE ACCESS TO INFORMATION ACT, THE PRIVACY ACT, AND OTHER STATUTES AS APPROPRIATE”.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

**DIRECTOR PERSONNEL APPLIED RESEARCH
NATIONAL DEFENCE HEADQUARTERS**

Protecting the Confidentiality of Your Responses

Director Personnel Applied Research National Defence Headquarters (D Pers AR) will protect the confidentiality of your responses to the extent permissible under Canadian law.

You should be aware that under the Access to Information Act, Canadian citizens are entitled to obtain copies of research reports and research data (including the database pertaining to this project) held in Federal government files. Similarly, under the Privacy Act, Canadian citizens are entitled to copies of all information concerning them that is held in federal government files including research databases. Prior to releasing requested information, the Directorate of Access to Information and Privacy (DAIP) screens the data to ensure that individual identities are not disclosed.

This questionnaire is designed to find out specific personality traits. It asks about a variety of subjects such as your attitudes towards other people, what you like doing, and how you would feel in particular circumstances. The inventory takes about half an hour to complete, but you may take longer if you need. The inventory is available in both official languages. Inform the administrator if you do not have a questionnaire in your preferred language.

Answer honestly. There are no 'right' or 'wrong' answers. The questionnaire is designed to detect faking. Your responses may be verified. Please respond as honestly and accurately as you can. Individuals who do not respond honestly may be removed from the selection process.

Upon completion of this measure, review your answers and ensure that you have answered each item.

Please complete and return **ALL THE PAGES** of this inventory.

Name		Service Number							

Date of Birth (DD-MM-YYYY)									Gender (Check applicable box)			
									Male	①	Female	②

Please read the following instructions carefully before filling out the inventory.

Please respond to the scaled questions by filling in one bubble per section with a fine-tipped marker or a dark coloured pen.

1	2	3	4	5	6	7
☐	☒	☐	☐	☐	☐	☐

If you change your mind about your responses, please put an X through the incorrect bubble and fill in the correct answer.

1	2	3	4	5	6	7
☐	☐	☒	☐	☒	☐	☐

Please return all the pages of the inventory.

Part I Adjective Checklist

On the following pages you will find a number of adjectives. You should read through the list and decide how well each of them describes you.

Here is an example:

'Cautious'

Decide if 'cautious' is characteristic of you. By characteristic, we mean how does this adjective apply to you. Give each adjective a number, which represents how characteristic it is. Below you will see how to answer using the numbers 1 to 7.

- 1 - Extremely Uncharacteristic**
- 2 - Quite Uncharacteristic**
- 3 - Slightly Uncharacteristic**
- 4 - Neither Characteristic Nor Uncharacteristic**
- 5 - Slightly Characteristic**
- 6 - Quite Characteristic**
- 7 - Extremely Characteristic**

If you decide 'cautious' is 'quite uncharacteristic' of you, then your answer to 'cautious' will be '2', because the 'quite uncharacteristic' rating is represented by the number '2'. For this item, you would blacken the bubble with the number '2' in it

Please reply to all adjectives. Give your first impression of how characteristic each statement is of you. Don't spend too long on deciding what your answer should be. Answer all questions, even if you are not entirely sure of your answer.

Please try to avoid using the center of the scale 4 unless you really have to.

ADJECTIVE

1	2	3	4	5	6	7
Extremely Uncharacteristic	Quite Uncharacteristic	Slightly Uncharacteristic	Neither Characteristic Nor Uncharacteristic	Slightly Characteristic	Quite Characteristic	Extremely Characteristic

1.	Self-pitying	①	②	③	④	⑤	⑥	⑦
2.	Withdrawn	①	②	③	④	⑤	⑥	⑦
3.	Philosophical	①	②	③	④	⑤	⑥	⑦
4.	Pleasant	①	②	③	④	⑤	⑥	⑦
5.	Thorough	①	②	③	④	⑤	⑥	⑦
6.	Talkative	①	②	③	④	⑤	⑥	⑦
7.	Introspective	①	②	③	④	⑤	⑥	⑦
8.	Disorganized	①	②	③	④	⑤	⑥	⑦
9.	Friendly	①	②	③	④	⑤	⑥	⑦
10.	Precise	①	②	③	④	⑤	⑥	⑦
11.	Quiet	①	②	③	④	⑤	⑥	⑦
12.	Warm	①	②	③	④	⑤	⑥	⑦
13.	Orderly	①	②	③	④	⑤	⑥	⑦
14.	Generous	①	②	③	④	⑤	⑥	⑦
15.	Careful	①	②	③	④	⑤	⑥	⑦
16.	Reserved	①	②	③	④	⑤	⑥	⑦
17.	Cheerful	①	②	③	④	⑤	⑥	⑦
18.	Efficient	①	②	③	④	⑤	⑥	⑦
19.	Silent	①	②	③	④	⑤	⑥	⑦
20.	Sympathetic	①	②	③	④	⑤	⑥	⑦
21.	Perfectionist	①	②	③	④	⑤	⑥	⑦
22.	Kind	①	②	③	④	⑤	⑥	⑦
23.	Responsible	①	②	③	④	⑤	⑥	⑦
24.	Verbal	①	②	③	④	⑤	⑥	⑦
25.	Affectionate	①	②	③	④	⑤	⑥	⑦
26.	Organized	①	②	③	④	⑤	⑥	⑦
27.	Helpful	①	②	③	④	⑤	⑥	⑦
28.	Neat	①	②	③	④	⑤	⑥	⑦

This is the end of this section. Please continue over to the next page.

PROTECTED B (once completed)

D/G

Part II Statements

On the following pages you will find a number of statements. Please read through the list and decide how well each one of them describes you. Give each statement a number, which represents how characteristic it is of you. Below you will see how to answer using the numbers 1 to 7.

- 1 - Extremely Uncharacteristic**
- 2 - Quite Uncharacteristic**
- 3 - Slightly Uncharacteristic**
- 4 - Neither Characteristic Nor Uncharacteristic**
- 5 - Slightly Characteristic**
- 6 - Quite Characteristic**
- 7 - Extremely Characteristic**

Here is an example of statement:

'I often try to find new and more efficient ways of doing things.'

Decide if this statement is characteristic of you. If you decide 'I often try to find new and more efficient ways of doing things' is 'slightly uncharacteristic of you', then your answer to this item will be '3', because the 'slightly uncharacteristic' rating is represented by the number '3'. For this item, you would blacken the bubble with the number '3' in it.

Please consider and respond to all statements. Give your first impression of whether each statement describes you. Don't spend too long on deciding what your answer should be.

Answer all questions, even if you are not entirely sure of your answer.

Please try to avoid using the center of the scale 4 unless you really have to.

STATEMENTS

1	2	3	4	5	6	7
Extremely Uncharacteristic	Quite Uncharacteristic	Slightly Uncharacteristic	Neither Characteristic Nor Uncharacteristic	Slightly Characteristic	Quite Characteristic	Extremely Characteristic

1.	I tend to get upset very easily.	①	②	③	④	⑤	⑥	⑦
2.	I like parties, where there are a lot of people.	①	②	③	④	⑤	⑥	⑦
3.	I have never taken advantage of another person even when I had a chance.	①	②	③	④	⑤	⑥	⑦
4.	I would enjoy being a theoretical scientist.	①	②	③	④	⑤	⑥	⑦
5.	I often worry about the future.	①	②	③	④	⑤	⑥	⑦
6.	I have never made a mistake at work without reporting it.	①	②	③	④	⑤	⑥	⑦
7.	I like to help others when they are down on their luck.	①	②	③	④	⑤	⑥	⑦
8.	I always try to do more than is expected of me.	①	②	③	④	⑤	⑥	⑦
9.	I spend a lot of time analyzing the motives behind the actions of others.	①	②	③	④	⑤	⑥	⑦
10.	I would not lie even if I knew I would not get caught.	①	②	③	④	⑤	⑥	⑦
11.	Sometimes I get so upset I feel sick inside.	①	②	③	④	⑤	⑥	⑦
12.	If things get too boring at a party I try to get things going.	①	②	③	④	⑤	⑥	⑦
13.	Even when my team at work or my friends did not follow my advice, I never got upset or angry.	①	②	③	④	⑤	⑥	⑦
14.	I find intellectual things more interesting than sports.	①	②	③	④	⑤	⑥	⑦
15.	I often feel jittery and tense.	①	②	③	④	⑤	⑥	⑦
16.	I like to keep all my belongings neat and organized.	①	②	③	④	⑤	⑥	⑦
17.	When I am invited somewhere I don't want to go, I sometimes make up a "good excuse".	①	②	③	④	⑤	⑥	⑦
18.	I enjoy visiting art museums.	①	②	③	④	⑤	⑥	⑦
19.	When I am under stress I often feel that I am about to breakdown.	①	②	③	④	⑤	⑥	⑦
20.	Even when I may be late I always follow all the rules on the road.	①	②	③	④	⑤	⑥	⑦
21.	I am uneasy when I am the centre of attention.	①	②	③	④	⑤	⑥	⑦
22.	I am fascinated with the theory of evolution.	①	②	③	④	⑤	⑥	⑦
23.	I am often nervous and tense.	①	②	③	④	⑤	⑥	⑦

Please continue over to the next page.

STATEMENTS

1	2	3	4	5	6	7
Extremely Uncharacteristic	Quite Uncharacteristic	Slightly Uncharacteristic	Neither Characteristic Nor Uncharacteristic	Slightly Characteristic	Quite Characteristic	Extremely Characteristic

24.	When a friend tells me something behind another person's back, I always change the topic or stop the person from continuing.	①	②	③	④	⑤	⑥	⑦
25.	If I start something I work until it is finished to my satisfaction.	①	②	③	④	⑤	⑥	⑦
26.	I often think about the wonders of nature.	①	②	③	④	⑤	⑥	⑦
27.	When a friend of mine doesn't invite me to a party or neglects me, I try to get even.	①	②	③	④	⑤	⑥	⑦
28.	My feelings are easily hurt.	①	②	③	④	⑤	⑥	⑦
29.	In meetings, I tend to let others do most of the talking.	①	②	③	④	⑤	⑥	⑦
30.	I have a lot of intellectual curiosity.	①	②	③	④	⑤	⑥	⑦
31.	I often procrastinate.	①	②	③	④	⑤	⑥	⑦
32.	I often feel tired and run down.	①	②	③	④	⑤	⑥	⑦
33.	I like to have a place for everything and everything in its place.	①	②	③	④	⑤	⑥	⑦
34.	I never cheat on exams, work projects or other works even if I get a chance.	①	②	③	④	⑤	⑥	⑦
35.	My friends consider me to be bashful.	①	②	③	④	⑤	⑥	⑦
36.	I spend a lot of time in meditation and deep thought.	①	②	③	④	⑤	⑥	⑦
37.	I am often sad and depressed.	①	②	③	④	⑤	⑥	⑦
38.	I always like people I meet.	①	②	③	④	⑤	⑥	⑦
39.	I try to be kind to everyone I know.	①	②	③	④	⑤	⑥	⑦
40.	I try to set a schedule for accomplishing tasks and stick to it.	①	②	③	④	⑤	⑥	⑦
41.	I never get jealous when someone gets something better than me.	①	②	③	④	⑤	⑥	⑦
42.	I like to strike up conversations with strangers.	①	②	③	④	⑤	⑥	⑦
43.	I feel that I am more intellectual than most of my friends.	①	②	③	④	⑤	⑥	⑦
44.	I worry more than most people.	①	②	③	④	⑤	⑥	⑦
45.	I am always generous when it comes to helping others.	①	②	③	④	⑤	⑥	⑦

Please continue over to the next page.

STATEMENTS

1	2	3	4	5	6	7
Extremely Uncharacteristic	Quite Uncharacteristic	Slightly Uncharacteristic	Neither Characteristic Nor Uncharacteristic	Slightly Characteristic	Quite Characteristic	Extremely Characteristic

46.	There are times when I feel sorry for myself.	①	②	③	④	⑤	⑥	⑦
47.	I am a very shy person.	①	②	③	④	⑤	⑥	⑦
48.	I like to spend time in intellectual discussions with my friends.	①	②	③	④	⑤	⑥	⑦
49.	I'm often fearful that I will fail to reach my goals.	①	②	③	④	⑤	⑥	⑦
50.	I always treat other people with kindness.	①	②	③	④	⑤	⑥	⑦
51.	Most of my friends would describe me as a 'talker'.	①	②	③	④	⑤	⑥	⑦
52.	I often have headaches when things are going wrong.	①	②	③	④	⑤	⑥	⑦
53.	I have thought a lot about the origins of the universe.	①	②	③	④	⑤	⑥	⑦
54.	I try to be pleasant in every situation.	①	②	③	④	⑤	⑥	⑦
55.	Sometimes I feel discouraged and simply want to give up.	①	②	③	④	⑤	⑥	⑦
56.	I tend to be a loner.	①	②	③	④	⑤	⑥	⑦
57.	I am highly interested in all fields of science.	①	②	③	④	⑤	⑥	⑦
58.	Even if I don't like them, I try always to be considerate of others.	①	②	③	④	⑤	⑥	⑦
59.	Philosophical discussions bore me.	①	②	③	④	⑤	⑥	⑦

This is the end of this section.

Thank you for your participation.

Appendix F

IPIP 50 Item Marker Test

Appendix F**International Personality Item Pool (IPIP)****50 Big-Five Factor Markers****Instructions for Administration**

On the following pages, there are phrases describing people's behaviours. Please use the rating scale below to describe how accurately each statement describes **you**. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself. Do not spend too much time considering your answers.

Please read each statement carefully, and then circle the number that corresponds to the number on the scale below.

Response Options

- 1:** Very Inaccurate
- 2:** Moderately Inaccurate
- 3:** Neither Inaccurate nor Accurate
- 4:** Moderately Accurate
- 5:** Very Accurate

You will notice this questionnaire is very similar to the one just completed. This is because they are “parallel” forms. This questionnaire will be compared to the first one so we can determine which one is most useful for CF purposes.

Last Name: _____

IPIP 50 Big-Five Factor Markers

- 1: Very Inaccurate**
2: Moderately Inaccurate
3: Neither Inaccurate nor Accurate
4: Moderately Accurate
5: Very Accurate

	STATEMENT	1	2	3	4	5
	I, ...					
1	Am the life of the party.	1	2	3	4	5
2	Feel little concern for others.	1	2	3	4	5
3	Am always prepared.	1	2	3	4	5
4	Get stressed out easily.	1	2	3	4	5
5	Have a rich vocabulary.	1	2	3	4	5
6	Don't talk a lot.	1	2	3	4	5
7	Am interested in people.	1	2	3	4	5
8	Leave my belongings around.	1	2	3	4	5
9	Am relaxed most of the time.	1	2	3	4	5
10	Have difficulty understanding abstract ideas.	1	2	3	4	5
11	Feel comfortable around people.	1	2	3	4	5
12	Insult people.	1	2	3	4	5
13	Pay attention to details.	1	2	3	4	5
14	Worry about things.	1	2	3	4	5
15	Have a vivid imagination.	1	2	3	4	5
16	Keep in the background.	1	2	3	4	5
17	Sympathize with others' feelings.	1	2	3	4	5
18	Make a mess of things.	1	2	3	4	5
19	Seldom feel blue.	1	2	3	4	5
20	Am not interested in abstract ideas.	1	2	3	4	5
21	Start conversations.	1	2	3	4	5
22	Am not interested in other people's problems.	1	2	3	4	5
23	Get chores done right away.	1	2	3	4	5
24	Am easily disturbed.	1	2	3	4	5
25	Have excellent ideas.	1	2	3	4	5

- 1: Very Inaccurate**
2: Moderately Inaccurate
3: Neither Inaccurate nor Accurate
4: Moderately Accurate
5: Very Accurate

26	Have little to say.	1	2	3	4	5
27	Have a soft heart.	1	2	3	4	5
28	Often forget to put things back in their proper place.	1	2	3	4	5
29	Get upset easily.	1	2	3	4	5
30	Do not have a good imagination.	1	2	3	4	5
31	Talk to a lot of different people at parties.	1	2	3	4	5
32	Am not really interested in others.	1	2	3	4	5
33	Like order.	1	2	3	4	5
34	Change my mood a lot.	1	2	3	4	5
35	Am quick to understand things.	1	2	3	4	5
36	Don't like to draw attention to myself.	1	2	3	4	5
37	Take time out for others.	1	2	3	4	5
38	Shirk my duties.	1	2	3	4	5
39	Have frequent mood swings.	1	2	3	4	5
40	Use difficult words.	1	2	3	4	5
41	Don't mind being the centre of attention.	1	2	3	4	5
42	Feel others' emotions.	1	2	3	4	5
43	Follow a schedule.	1	2	3	4	5
44	Get irritated easily.	1	2	3	4	5
45	Spend time reflecting on things.	1	2	3	4	5
46	Am quiet around strangers.	1	2	3	4	5
47	Make people feel at ease.	1	2	3	4	5
48	Am exacting in my work.	1	2	3	4	5
49	Often feel blue.	1	2	3	4	5
50	Am full of ideas.	1	2	3	4	5

International Personality Item Pool (IPIP)

50 indicateurs des Cinq grands facteurs de la personnalité

Directives d'administration du test

Vous trouverez dans les pages qui suivent des phrases décrivant certains comportements. Veuillez utiliser l'échelle de cotation ci-dessous pour indiquer avec quel niveau d'exactitude chacune de ces phrases **vous** décrit. Il s'agit de vous décrire comme vous êtes habituellement, le plus souvent, et non comme vous souhaitez être à l'avenir. Décrivez-vous de la façon dont vous vous percevez réellement. Répondez spontanément, sans réfléchir trop longtemps à vos réponses.

Lisez soigneusement chaque énoncé, puis encerclez le numéro correspondant à votre réponse, selon l'échelle ci-dessous.

Choix de réponses

- 1** : Très inexact
- 2** : Assez inexact
- 3** : Ni inexact, ni exact
- 4** : Assez exact
- 5** : Très exact

Vous remarquerez que ce questionnaire est très semblable à celui que vous venez de remplir. C'est parce qu'il s'agit de formulaires « parallèles ». Ce questionnaire sera comparé au premier pour nous aider à déterminer lequel correspond le mieux aux besoins des Forces canadiennes.

Nom de famille : _____

50 Indicateurs IPIP des Cinq grands facteurs

- 1** : Très inexact
2 : Assez inexact
3 : Ni inexact, ni exact
4 : Assez exact
5 : Très exact

ÉNONCÉ	1	2	3	4	5
Je ...					
1 Suis un véritable boute-en-train.	1	2	3	4	5
2 Me préoccupe peu des autres.	1	2	3	4	5
3 Suis toujours prêt.	1	2	3	4	5
4 Deviens facilement tendu.	1	2	3	4	5
5 Possède un riche vocabulaire.	1	2	3	4	5
6 Parle peu.	1	2	3	4	5
7 M'intéresse aux gens.	1	2	3	4	5
8 Laisse traîner mes affaires.	1	2	3	4	5
9 Suis détendu la plupart du temps.	1	2	3	4	5
10 Ai de la difficulté à comprendre les idées abstraites.	1	2	3	4	5
11 Me sens bien quand je suis avec d'autres.	1	2	3	4	5
12 Insulte les gens.	1	2	3	4	5
13 Suis attentif aux détails.	1	2	3	4	5
14 Suis facilement soucieux.	1	2	3	4	5
15 Possède une imagination fertile.	1	2	3	4	5
16 Préfère rester en arrière-plan.	1	2	3	4	5
17 Sympathise avec les sentiments des gens.	1	2	3	4	5
18 Gâche souvent les situations.	1	2	3	4	5
19 Me sens rarement déprimé.	1	2	3	4	5
20 Ne m'intéresse pas aux idées abstraites.	1	2	3	4	5
21 Amorce des conversations.	1	2	3	4	5
22 Ne m'intéresse pas aux problèmes des autres.	1	2	3	4	5
23 M'acquitte immédiatement de mes tâches.	1	2	3	4	5
24 Suis facilement dérangé.	1	2	3	4	5
25 Ai d'excellentes idées.	1	2	3	4	5

- 1** : Très inexact
2 : Assez inexact
3 : Ni inexact, ni exact
4 : Assez exact
5 : Très exact

26	Ai peu à dire.	1	2	3	4	5
27	Ai le cœur tendre.	1	2	3	4	5
28	Oublie souvent de remettre les choses à leur place.	1	2	3	4	5
29	Suis facilement bouleversé(e).	1	2	3	4	5
30	N'ai pas beaucoup d'imagination.	1	2	3	4	5
31	Parle à beaucoup de monde différent dans les <i>partys</i> .	1	2	3	4	5
32	Ne m'intéresse pas vraiment aux autres.	1	2	3	4	5
33	Aime l'ordre.	1	2	3	4	5
34	Change souvent d'humeur.	1	2	3	4	5
35	Comprends vite les choses.	1	2	3	4	5
36	N'aime pas à attirer l'attention sur moi-même.	1	2	3	4	5
37	Consacre du temps aux autres.	1	2	3	4	5
38	Tends à éviter mes responsabilités.	1	2	3	4	5
39	Ai de fréquents changements d'humeur.	1	2	3	4	5
40	Utilise des mots complexes.	1	2	3	4	5
41	Aime bien être le centre d'attention.	1	2	3	4	5
42	Ressens les émotions des autres.	1	2	3	4	5
43	Fonctionne en suivant un horaire.	1	2	3	4	5
44	M'irrite facilement.	1	2	3	4	5
45	Passe beaucoup de temps à réfléchir.	1	2	3	4	5
46	Parle peu en présence d'étrangers.	1	2	3	4	5
47	Mets les gens à l'aise.	1	2	3	4	5
48	Suis exigeant dans mon travail.	1	2	3	4	5
49	Ai souvent le cafard.	1	2	3	4	5
50	Ai plein d'idées.	1	2	3	4	5

Appendix G
Multiple Regression Models

Appendix G – Summaries of Multiple Regressions

Factors

Dependent Variable: Overall Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.245(a)	.060	.045	3.172	.060	3.867	2	121	.024	1.204
2	.308(b)	.095	.072	3.126	.035	4.608	1	120	.034	
3	.357(c)	.127	.098	3.082	.032	4.408	1	119	.038	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	12.805	1.187		10.789	.000			
	gender	-.635	.778	-.072	-.817	.416	-.100	-.074	-.072
	tot_perc	.027	.011	.226	2.541	.012	.234	.225	.224
2	(Constant)	18.678	2.975		6.278	.000			
	gender	-.745	.768	-.085	-.969	.334	-.100	-.088	-.084
	tot_perc	.027	.010	.228	2.602	.010	.234	.231	.226
	Scores for C_TSD	-.034	.016	-.187	-2.147	.034	-.177	-.192	-.186
3	(Constant)	20.283	3.032		6.690	.000			
	gender	-.816	.758	-.093	-1.077	.284	-.100	-.098	-.092
	tot_perc	.028	.010	.237	2.747	.007	.234	.244	.235
	Scores for C_TSD	-.047	.017	-.255	-2.778	.006	-.177	-.247	-.238
	Scores for E_TSD	.023	.011	.192	2.100	.038	.089	.189	.180

Dependent Variable: Leader

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.282(a)	.080	.064	.966	.080	5.237	2	121	.007	1.191
2	.356(b)	.127	.105	.945	.047	6.513	1	120	.012	
3	.422(c)	.178	.151	.921	.051	7.423	1	119	.007	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.227	.362		8.925	.000			
	gender	-.313	.237	-.116	-1.323	.188	-.146	-.119	-.115
	tot_perc	.009	.003	.244	2.773	.006	.258	.244	.242
2	(Constant)	5.338	.899		5.934	.000			
	gender	-.353	.232	-.131	-1.519	.131	-.146	-.137	-.130
	tot_perc	.009	.003	.246	2.863	.005	.258	.253	.244
	Scores for C_TSD	-.012	.005	-.218	-2.552	.012	-.205	-.227	-.218
3	(Constant)	5.960	.906		6.581	.000			
	gender	-.381	.226	-.141	-1.681	.095	-.146	-.152	-.140
	tot_perc	.009	.003	.258	3.080	.003	.258	.272	.256
	Scores for C_TSD	-.017	.005	-.304	-3.413	.001	-.205	-.299	-.284
	Scores for E_TSD	.009	.003	.242	2.724	.007	.120	.242	.226

Dependent Variable: Task

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.263(a)	.069	.054	1.71202	.069	4.479	2	121	.013	1.176
2	.317(b)	.100	.078	1.68993	.031	4.185	1	120	.043	
3	.362(c)	.131	.102	1.66754	.031	4.244	1	119	.042	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.484	.641		10.123	.000			
	gender	-.516	.420	-.109	-1.228	.222	-.136	-.111	-.108
	tot_perc	.015	.006	.226	2.562	.012	.239	.227	.225
2	(Constant)	9.510	1.609		5.912	.000			
	gender	-.572	.415	-.120	-1.377	.171	-.136	-.125	-.119
	tot_perc	.015	.006	.228	2.617	.010	.239	.232	.227
	Scores for C_TSD	-.018	.009	-.178	-2.046	.043	-.165	-.184	-.177
3	(Constant)	10.362	1.640		6.317	.000			
	gender	-.610	.410	-.128	-1.487	.140	-.136	-.135	-.127
	tot_perc	.015	.006	.238	2.759	.007	.239	.245	.236
	Scores for C_TSD	-.024	.009	-.244	-2.667	.009	-.165	-.237	-.228
	Scores for E_TSD	.012	.006	.188	2.060	.042	.088	.186	.176

Dependent Variable: Contextual

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.205(a)	.042	.026	1.62187	.042	2.659	2	121	.074	1.227
2	.270(b)	.073	.050	1.60213	.031	4.000	1	120	.048	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.347	.607		10.459	.000			
	gender	-.138	.398	-.031	-.348	.729	-.055	-.032	-.031
	tot_perc	.012	.005	.199	2.221	.028	.203	.198	.198
2	(Constant)	9.152	1.525		6.001	.000			
	gender	-.191	.394	-.043	-.484	.629	-.055	-.044	-.043
	tot_perc	.012	.005	.201	2.270	.025	.203	.203	.200
	Scores for C_TSD	-.016	.008	-.176	-2.000	.048	-.169	-.180	-.176

Dependent Variable: Support

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.215(a)	.046	.030	.906	.046	2.933	2	121	.057	1.593
2	.282(b)	.079	.056	.894	.033	4.311	1	120	.040	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.207	.339		9.458	.000			
	gender	-.107	.222	-.043	-.484	.630	-.068	-.044	-.043
	tot_perc	.007	.003	.205	2.298	.023	.211	.204	.204
2	(Constant)	4.832	.851		5.677	.000			
	gender	-.138	.220	-.055	-.627	.532	-.068	-.057	-.055
	tot_perc	.007	.003	.207	2.351	.020	.211	.210	.206
	Scores for C_TSD	-.009	.005	-.182	-2.076	.040	-.175	-.186	-.182

Facets

Facets with Highest Correlation with Overall Performance

Dependent Variable: Overall Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.245(a)	.060	.045	3.172	.060	3.867	2	121	.024	1.390
2	.310(b)	.096	.074	3.123	.036	4.815	1	120	.030	
3	.356(c)	.127	.097	3.083	.030	4.113	1	119	.045	
4	.407(d)	.166	.131	3.026	.039	5.567	1	118	.020	
5	.452(e)	.204	.163	2.968	.038	5.647	1	117	.019	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	12.805	1.187		10.789	.000			
	gender	-.635	.778	-.072	-.817	.416	-.100	-.074	-.072
	tot_perc	.027	.011	.226	2.541	.012	.234	.225	.224
2	(Constant)	15.369	1.653		9.300	.000			
	gender	-.626	.766	-.071	-.818	.415	-.100	-.074	-.071
	tot_perc	.028	.010	.236	2.692	.008	.234	.239	.234
3	(Constant)	11.865	2.377		4.992	.000			
	gender	-.662	.756	-.076	-.875	.383	-.100	-.080	-.075
	tot_perc	.030	.010	.251	2.890	.005	.234	.256	.248
4	(Constant)	16.920	3.167		5.343	.000			
	gender	-.785	.744	-.090	-1.055	.294	-.100	-.097	-.089
	tot_perc	.031	.010	.257	3.021	.003	.234	.268	.254
5	(Constant)	20.052	3.374		5.942	.000			
	gender	-.831	.730	-.095	-1.138	.257	-.100	-.105	-.094
	tot_perc	.031	.010	.263	3.144	.002	.234	.279	.259
	o4orig	-.102	.050	-.171	-2.034	.044	-.178	-.185	-.168
	a2orig	.175	.067	.224	2.615	.010	.126	.235	.216
	c1orig	-.106	.036	-.256	-2.911	.004	-.167	-.260	-.240
	e1orig	.051	.022	.203	2.376	.019	.156	.215	.196

Dependent Variable: Task

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.263(a)	.069	.054	1.71202	.069	4.479	2	121	.013	1.452
2	.342(b)	.117	.095	1.67419	.048	6.530	1	120	.012	
3	.386(c)	.149	.120	1.65036	.032	4.492	1	119	.036	
4	.430(d)	.185	.150	1.62246	.035	5.126	1	118	.025	
5	.477(e)	.228	.188	1.58558	.043	6.555	1	117	.012	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.484	.641		10.123	.000			
	gender	-.516	.420	-.109	-1.228	.222	-.136	-.111	-.108
	tot_perc	.015	.006	.226	2.562	.012	.239	.227	.225
2	(Constant)	8.085	.886		9.127	.000			
	gender	-.510	.411	-.107	-1.242	.217	-.136	-.113	-.107
	tot_perc	.015	.006	.238	2.750	.007	.239	.243	.236
3	o4orig	-.071	.028	-.220	-2.555	.012	-.207	-.227	-.219
	(Constant)	6.125	1.272		4.815	.000			
	gender	-.530	.405	-.112	-1.309	.193	-.136	-.119	-.111
	tot_perc	.016	.006	.253	2.961	.004	.239	.262	.250
4	o4orig	-.079	.028	-.243	-2.849	.005	-.207	-.253	-.241
	a2orig	.077	.036	.181	2.119	.036	.126	.191	.179
	(Constant)	8.726	1.698		5.138	.000			
	gender	-.593	.399	-.125	-1.487	.140	-.136	-.136	-.124
	tot_perc	.017	.005	.260	3.084	.003	.239	.273	.256
	o4orig	-.072	.027	-.224	-2.656	.009	-.207	-.237	-.221
5	a2orig	.095	.037	.224	2.596	.011	.126	.232	.216
	c1orig	-.044	.019	-.195	-2.264	.025	-.158	-.204	-.188
	(Constant)	10.528	1.803		5.840	.000			
	gender	-.620	.390	-.130	-1.589	.115	-.136	-.145	-.129
	tot_perc	.017	.005	.265	3.225	.002	.239	.286	.262

o4orig	-.065	.027	-.201	-2.417	.017	-.207	-.218	-.196
a2orig	.096	.036	.227	2.695	.008	.126	.242	.219
c1orig	-.056	.019	-.249	-2.869	.005	-.158	-.256	-.233
e1orig	.030	.012	.215	2.560	.012	.172	.230	.208

Dependent Variable: Contextual

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.205(a)	.042	.026	1.62187	.042	2.659	2	121	.074	1.248

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.347	.607		10.459	.000			
	gender	-.138	.398	-.031	-.348	.729	-.055	-.032	-.031
	tot_perc	.012	.005	.199	2.221	.028	.203	.198	.198

Dependent Variable: Support

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.215(a)	.046	.030	.906	.046	2.933	2	121	.057	1.660

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.207	.339		9.458	.000			
	gender	-.107	.222	-.043	-.484	.630	-.068	-.044	-.043
	tot_perc	.007	.003	.205	2.298	.023	.211	.204	.204

Dependent Variable: Leader

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.282(a)	.080	.064	.966	.080	5.237	2	121	.007	1.367
2	.367(b)	.135	.113	.941	.055	7.657	1	120	.007	
3	.411(c)	.169	.141	.926	.034	4.931	1	119	.028	
4	.470(d)	.221	.188	.900	.051	7.786	1	118	.006	
5	.505(e)	.255	.217	.884	.035	5.457	1	117	.021	

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations		
		B	Std. Error	Beta				Zero-order	Partial	Part
1	(Constant)	3.227	.362			8.925	.000			
	gender	-.313	.237	-.116		-1.323	.188	-.146	-.119	-.115
	tot_perc	.009	.003	.244		2.773	.006	.258	.244	.242
2	(Constant)	4.201	.498			8.439	.000			
	gender	-.310	.231	-.115		-1.344	.181	-.146	-.122	-.114
	tot_perc	.009	.003	.256		2.990	.003	.258	.263	.254
3	o4orig	-.043	.016	-.235		-2.767	.007	-.222	-.245	-.235
	(Constant)	4.688	.537			8.735	.000			
	gender	-.315	.227	-.117		-1.387	.168	-.146	-.126	-.116
4	tot_perc	.010	.003	.260		3.086	.003	.258	.272	.258
	o4orig	-.040	.015	-.220		-2.627	.010	-.222	-.234	-.219
	e1orig	.015	.007	.186		2.221	.028	.195	.199	.186
5	(Constant)	6.945	.963			7.214	.000			
	gender	-.357	.221	-.132		-1.612	.110	-.146	-.147	-.131
	tot_perc	.010	.003	.265		3.226	.002	.258	.285	.262
5	o4orig	-.034	.015	-.186		-2.250	.026	-.222	-.203	-.183
	e1orig	.019	.007	.244		2.898	.004	.195	.258	.235
	c1orig	-.030	.011	-.236		-2.790	.006	-.188	-.249	-.227
5	(Constant)	6.147	1.005			6.117	.000			
	gender	-.376	.217	-.139		-1.730	.086	-.146	-.158	-.138
	tot_perc	.010	.003	.282		3.486	.001	.258	.307	.278
5	o4orig	-.038	.015	-.206		-2.522	.013	-.222	-.227	-.201
	e1orig	.019	.006	.247		2.987	.003	.195	.266	.238
	c1orig	-.036	.011	-.279		-3.277	.001	-.188	-.290	-.261
5	a2orig	.047	.020	.193		2.336	.021	.084	.211	.186

Facets Chosen by SMEs as Most Representative of Their Factor

Dependent Variable: Overall Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.245(a)	.060	.045	3.172	.060	3.867	2	121	.024	1.295
2	.303(b)	.092	.069	3.130	.032	4.230	1	120	.042	
3	.369(c)	.136	.107	3.066	.044	6.109	1	119	.015	
4	.420(d)	.176	.141	3.007	.040	5.691	1	118	.019	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	12.805	1.187		10.789	.000			
	gender	-.635	.778	-.072	-.817	.416	-.100	-.074	-.072
	tot_perc	.027	.011	.226	2.541	.012	.234	.225	.224
2	(Constant)	18.303	2.918		6.271	.000			
	gender	-.733	.769	-.084	-.953	.342	-.100	-.087	-.083
	tot_perc	.027	.010	.229	2.616	.010	.234	.232	.228
3	(Constant)	21.920	3.211		6.826	.000			
	gender	-.778	.753	-.089	-1.033	.304	-.100	-.094	-.088
	tot_perc	.028	.010	.236	2.747	.007	.234	.244	.234
4	c1orig	-.095	.036	-.230	-2.617	.010	-.167	-.233	-.223
	e1orig	.055	.022	.217	2.472	.015	.156	.221	.211
	(Constant)	19.003	3.379		5.624	.000			
	gender	-.849	.740	-.097	-1.147	.254	-.100	-.105	-.096
	tot_perc	.030	.010	.253	2.995	.003	.234	.266	.250
	c1orig	-.115	.037	-.278	-3.146	.002	-.167	-.278	-.263
	e1orig	.056	.022	.222	2.584	.011	.156	.231	.216
	a2orig	.161	.067	.206	2.385	.019	.126	.214	.199

Dependent Variable: Task

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.263(a)	.069	.054	1.71202	.069	4.479	2	121	.013	1.326
2	.318(b)	.101	.079	1.68904	.032	4.316	1	120	.040	
3	.386(c)	.149	.121	1.65010	.048	6.730	1	119	.011	
4	.435(d)	.189	.155	1.61778	.040	5.802	1	118	.018	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.484	.641		10.123	.000			
	gender	-.516	.420	-.109	-1.228	.222	-.136	-.111	-.108
	tot_perc	.015	.006	.226	2.562	.012	.239	.227	.225
2	(Constant)	7.417	.775		9.567	.000			
	gender	-.523	.414	-.110	-1.264	.209	-.136	-.115	-.109
	tot_perc	.015	.006	.231	2.649	.009	.239	.235	.229
	e1orig	.025	.012	.180	2.077	.040	.172	.186	.180
3	(Constant)	11.448	1.728		6.624	.000			
	gender	-.593	.406	-.125	-1.462	.146	-.136	-.133	-.124
	tot_perc	.015	.006	.237	2.781	.006	.239	.247	.235
	e1orig	.032	.012	.232	2.671	.009	.172	.238	.226
	c1orig	-.051	.020	-.226	-2.594	.011	-.158	-.231	-.219
4	(Constant)	9.863	1.818		5.426	.000			
	gender	-.631	.398	-.133	-1.586	.115	-.136	-.144	-.131
	tot_perc	.016	.005	.254	3.033	.003	.239	.269	.251
	e1orig	.033	.012	.238	2.789	.006	.172	.249	.231
	c1orig	-.062	.020	-.275	-3.130	.002	-.158	-.277	-.259
	a2orig	.087	.036	.206	2.409	.018	.126	.216	.200

Dependent Variable: Contextual

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.205(a)	.042	.026	1.62187	.042	2.659	2	121	.074	1.248

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.347	.607		10.459	.000			
	gender	-.138	.398	-.031	-.348	.729	-.055	-.032	-.031
	tot_perc	.012	.005	.199	2.221	.028	.203	.198	.198

Dependent Variable: Leader

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.282(a)	.080	.064	.966	.080	5.237	2	121	.007	1.262
2	.348(b)	.121	.099	.948	.041	5.661	1	120	.019	
3	.433(c)	.187	.160	.916	.066	9.685	1	119	.002	
4	.464(d)	.215	.182	.904	.028	4.160	1	118	.044	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.227	.362		8.925	.000			
	gender	-.313	.237	-.116	-1.323	.188	-.146	-.119	-.115
	tot_perc	.009	.003	.244	2.773	.006	.258	.244	.242
2	(Constant)	3.827	.435		8.792	.000			
	gender	-.319	.233	-.118	-1.370	.173	-.146	-.124	-.117
	tot_perc	.009	.003	.249	2.887	.005	.258	.255	.247
3	(Constant)	6.509	.959		6.788	.000			
	gender	-.365	.225	-.135	-1.621	.108	-.146	-.147	-.134
	tot_perc	.009	.003	.256	3.072	.003	.258	.271	.254
4	e1orig	.021	.007	.265	3.120	.002	.195	.275	.258
	c1orig	-.034	.011	-.265	-3.112	.002	-.188	-.274	-.257
	(Constant)	5.759	1.015		5.672	.000			
	gender	-.383	.222	-.142	-1.722	.088	-.146	-.157	-.140
	tot_perc	.010	.003	.270	3.276	.001	.258	.289	.267
	e1orig	.021	.007	.270	3.215	.002	.195	.284	.262
	c1orig	-.039	.011	-.306	-3.538	.001	-.188	-.310	-.289
	a2orig	.041	.020	.172	2.040	.044	.084	.185	.166

Facets Chosen by SMEs as Most Likely to Predict the Criteria

Dependent Variable: Overall Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.245(a)	.060	.045	3.172	.060	3.867	2	121	.024	1.075

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	12.805	1.187		10.789	.000			
	gender	-.635	.778	-.072	-.817	.416	-.100	-.074	-.072
	tot_perc	.027	.011	.226	2.541	.012	.234	.225	.224

Dependent Variable: Task

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.263(a)	.069	.054	1.71202	.069	4.479	2	121	.013	1.076

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.484	.641		10.123	.000			
	gender	-.516	.420	-.109	-1.228	.222	-.136	-.111	-.108
	tot_perc	.015	.006	.226	2.562	.012	.239	.227	.225

Dependent Variable: Leader

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.282(a)	.080	.064	.966	.080	5.237	2	121	.007	1.196
2	.331(b)	.110	.087	.954	.030	4.040	1	120	.047	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.227	.362		8.925	.000			
	gender	-.313	.237	-.116	-1.323	.188	-.146	-.119	-.115
	tot_perc	.009	.003	.244	2.773	.006	.258	.244	.242
2	(Constant)	4.345	.661		6.572	.000			
	gender	-.331	.234	-.123	-1.415	.160	-.146	-.128	-.122
	tot_perc	.009	.003	.251	2.888	.005	.258	.255	.249
	c3orig	-.023	.011	-.173	-2.010	.047	-.157	-.180	-.173

Facets Selected Based on the Literature

Dependent Variable: Overall Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.245(a)	.060	.045	3.172	.060	3.867	2	121	.024	1.075

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	12.805	1.187		10.789	.000			
	gender	-.635	.778	-.072	-.817	.416	-.100	-.074	-.072
	tot_perc	.027	.011	.226	2.541	.012	.234	.225	.224

Dependent Variable: Task

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.263(a)	.069	.054	1.71202	.069	4.479	2	121	.013	1.076

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.484	.641		10.123	.000			
	gender	-.516	.420	-.109	-1.228	.222	-.136	-.111	-.108
	tot_perc	.015	.006	.226	2.562	.012	.239	.227	.225

Dependent Variable: Leader

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.282(a)	.080	.064	.966	.080	5.237	2	121	.007	1.111

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.227	.362		8.925	.000			
	gender	-.313	.237	-.116	-1.323	.188	-.146	-.119	-.115
	tot_perc	.009	.003	.244	2.773	.006	.258	.244	.242

Facets Selected by PCA

Dependent Variable: Overall Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.245(a)	.060	.045	3.172	.060	3.867	2	121	.024	1.075

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	12.805	1.187		10.789	.000			
	gender	-.635	.778	-.072	-.817	.416	-.100	-.074	-.072
	tot_perc	.027	.011	.226	2.541	.012	.234	.225	.224

Dependent Variable: Leader

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.282(a)	.080	.064	.966	.080	5.237	2	121	.007	1.277
2	.331(b)	.110	.087	.954	.030	4.040	1	120	.047	
3	.379(c)	.144	.115	.940	.034	4.706	1	119	.032	

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.227	.362		8.925	.000			
	gender	-.313	.237	-.116	-1.323	.188	-.146	-.119	-.115
	tot_perc	.009	.003	.244	2.773	.006	.258	.244	.242
2	(Constant)	4.345	.661		6.572	.000			
	gender	-.331	.234	-.123	-1.415	.160	-.146	-.128	-.122
	tot_perc	.009	.003	.251	2.888	.005	.258	.255	.249
3	c3orig	-.023	.011	-.173	-2.010	.047	-.157	-.180	-.173
	(Constant)	3.662	.723		5.061	.000			
	gender	-.317	.231	-.118	-1.374	.172	-.146	-.125	-.117
	tot_perc	.009	.003	.259	3.021	.003	.258	.267	.256
	c3orig	-.027	.011	-.206	-2.388	.019	-.157	-.214	-.203
	e2orig	.032	.015	.187	2.169	.032	.147	.195	.184

Dependent Variable: Task

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.263(a)	.069	.054	1.71202	.069	4.479	2	121	.013	1.076

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	6.484	.641		10.123	.000			
	gender	-.516	.420	-.109	-1.228	.222	-.136	-.111	-.108
	tot_perc	.015	.006	.226	2.562	.012	.239	.227	.225