The Relationship of Personality Traits to the Choice of Teaching as a Career

Kevin Quin & Helen M. G. Watt

Monash University

Titles:

Kevin Quin, MPsych (Counselling)

Helen M. G. Watt, PhD

Mailing address:

c/o – Assoc. Prof. Helen Watt

Faculty of Education

Monash University, Clayton campus

Wellington Road

Melbourne, Victoria, 3800

Australia

Email contacts:

kevin.quin1@gmail.com

helen.watt@education.monash.edu.au

Abstract

Teacher shortages compel consideration of the reasons individuals choose to enter the teaching profession. Researchers investigating elements of personality which influence career choice have used the Five-Factor theory of personality with limited success, perhaps from reliance on its broad factors rather than on specific facets within those factors. Practising teachers with up to three years' experience were interviewed to identify personality traits they thought important for teachers. A cohort of 74 volunteer trainee teachers in their third year of a four year course completed questionnaires designed to identify influential personality facets and teaching commitment. Specific facets rather than broad personality factors were more successful in identifying personality traits possessed by the trainee teachers. Prospective teachers scored high on the following facets: competence, dutifulness, achievement-striving, self-discipline (facets of the Conscientiousness factor); warmth, gregariousness, positive emotions (facets of the Extraversion factor); straightforwardness, altruism, compliance and tender-mindedness (facets of the Agreeableness factor). Scores were low on: modesty (a facet of the Agreeableness factor); anxiety, angry hostility and depression (facets of the Neuroticism factor). High scoring facets also correlated with teaching commitment factors of planned effort and planned commitment. These results suggest that measures of personality facets could be useful in providing guidance to prospective teachers and employers.

The Relationship of Personality Traits to the Choice of Teaching as a Career

It has long been hypothesised that performance on a task or work role is influenced by the worker's self-concept (Vroom, 1962). Vroom was later to observe that much is still to be learned about the nature of work roles and those who engage in them (Vroom, 1964). It has intuitive appeal to assume a link between constructs such as "self-concept" and "motives" to work role or achievement. Similarly it has been assumed that different sorts of personalities might better suit different sorts of jobs, that the personality of a Real Estate salesperson might be different from the personality of a computer programmer. For both employers and prospective employees the ability to predict whether the personality of a person is suited to a job is important. For applicants, information about the suitability of their personalities for particular careers might inform their choices; employers might be assisted in the selection process.

The Five-Factor Model of Personality

The emergence of the five-factor model of personality, "the most widely accepted personality structure in our time" (Judge & Ilies, 2002, p. 799), has provided a stimulus for consideration of the relationship between personality, and career choice. The Five-Factor model proposes that human personality has five major dimensions: Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. "The five factors represent the most basic dimensions underlying the traits identified both in natural languages and psychological questionnaires" (Costa & McCrae, 1992, p. 14). The five factors are each further subdivided into six facets which can be used to identify meaningful differences within the factors. The Five Factors are presented in the following Table 1 with their respective facets beneath.

< INSERT TABLE 1 HERE>

The developers of one accepted measure of the five-factor model of personality, the "NEO Personality Inventory-Revised" (NEO PI-R) have indicated that job performance can be linked to the factors of Openness and Conscientiousness and that personality characteristics might help personnel psychologists in recruitment, with the caution that different features of personality might be relevant to different types of jobs (Costa & McCrae, 1992). The emergence of validated, objective measures of personality such as the NEO PI-R could be of considerable assistance in placing individuals in positions which suit their personalities, if different elements of personality can be matched with the varieties of job requirements.

Personality Tests and Personnel Selection

The use of personality tests in selection processes was discouraged in the decades prior to the 1990's because some researchers concluded they did not have sufficient predictive validity (Schmitt, Gooding, Noe, & Kirsch, 1984; Schmit & Ryan, 1993). However, a meta-analysis addressing the problem of the low correlation between the results on personality tests and job performance concluded that the lack of predictive validity was the result of including a mix of personality frameworks for organising personality traits (Hurtz & Donovan, 2000). These researchers concentrated on studies using the five-factor model of personality, and identified low to moderate correlations between several of the Big Five factors and job performance. They suggested that research using the more specific *facets* of the Big Five factors might yield stronger results. Facet scales were introduced into the NEO PI-R because meaningful individual differences between individuals can be detected *within* the factors (Costa & McCrae, 1992): in the Agreeableness factor, for example, two individuals might have a similar factor score but vary markedly in their responses on the facets of Altruism, Modesty and

Compliance. It is entirely possible that the personality differences between individuals on the more specific facet scales influence their decisions and performance.

Further research into the predictive validity of the Big Five factors has been conducted (Paunonen & Ashton, 2001; Paunonen, Rothstein, & Jackson, 1999). These researchers found that carefully selected facet scales had better predicitive validity for job performance than the wider factor scales. These researchers discussed trait specific variance (Paunonen & Ashton, 2001) and found that using facet scales almost doubled the criterion variance explained when compared to using the wider factor scales. Importantly, these researchers concluded that carefully selected facet scales can predict behaviour more accurately than the combination of all the Big Five factors, and that a substantial part of the criterion variance of the facet scales is variance not predicted by the factor scales. These conclusions invite two other possibilities:

1. Using selected facet scales will reduce redundancy and allow the use of fewer items.
2. Using selected facet scales will increase the relevance of the information derived.

Definitions and Constructs

Much debate has ranged around the concept of motivation (Ryan & Deci, 2000; Van Yperen, 2006), and the absence of a theoretical framework to organise and understand the many traits involved in the study of work motivation has been lamented (Judge & Ilies, 2002). It has also been observed that within the construct *motivation* there is a plethora of terms such as "achievement", "affect", "attribution", "self-competence", "self-efficacy", "goals", "engagement", and "self-regulation" (Murphy & Alexander, 2000), and that researchers frequently use

such terms without providing definitions. As has been observed, "the predictive power of particular motivational constructs increases as one makes both the domain of the motivational construct and the achievement outcome being predicted more specific." (Eccles, 1987, p. 2). Achievement outcomes such as school subject or activity selection, success in that subject or activity, and selection of or success in a particular career, are all different sorts of outcomes which might require specific understanding of the links between motivation and achievement outcomes.

Murphy and Alexander (2000) noted a trend of motivation researchers towards "domain specific motivation". That is, instead of regarding motivation as a global construct, researchers are concentrating more on how an individual is "motivated" in a specific context, such as academic achievement or job performance. The authors noted that most motivational constructs are complex and multi-dimensional and require detailed and sensitive investigation.

In addition to the lack of a unifying theoretical framework and the lack of conceptual definition, there is also a concern (Judge & Ilies, 2002) that the role of personality variables tends not to be discussed in the motivation literature, for example, goal theory, expectancy-value theory and self-efficacy theory, do not include discussion of dispositional or personality traits. This proposed relationship between the psychological constructs of *personality* and *motivation* is of considerable interest in understanding and predicting performance outcomes.

Judge and Ilies (2002) conducted a meta-analysis of the relationship between the five-factor model of personality and three theories of achievement motivation and observed that the "Big Five" traits of Neuroticism, Extraversion and Conscientiousness were the strongest and most consistently studied correlates of job performance. They expressed surprise that the study of the

relationship between motivation theories based on goal theory, self-efficacy
theory, expectancy-value theory and the Big Five traits was limited, and the
relationship of motivation to two of the Big Five traits – Agreeableness and
Openness to Experience – is "virtually unstudied" (p. 780). These researchers
comment on the "enigma" of motivational research in that "Personality variables
do not play a prominent role in most motivational theories" (p. 806) and seems
remarkable that motivation theory has developed in isolation from personality
theory. Developments in personality research have provided well-validated,
normed measures which effectively operationalise the psychological constructs
they use, making them readily accessible for investigations by motivation
researchers.

There has been some, limited, role for personality variables in the
motivation literature. In a seminal study of the changes in self-concepts of ability
in and valuing of Mathematics, English, Sport and other activities, Eccles et al.
(1989) acknowledged the importance of elements of personality as having an
effect on the formulation of adolescents' goals and achievements. This valuable
contribution may be enhanced by further consideration of which elements of
personality might play an important role. It is also important that there be careful
definition of the terms used within an articulated personality theory framework.

This study will address these issues in the following ways:

1. A single career choice will be the specific outcome chosen for consideration
   which, we theorise, will relate to specific personality traits.

2. The study will identify personality traits which characterise workers in that
   career by interviewing and administering personality questionnaires to
   practitioners and recruits.

3. Working within the widely accepted personality theory framework of the Big Five personality factors and facets will avoid the "plethora of terms" and resultant conceptual confusion criticised by Murphy and Alexander (2000).

Factors Influencing the Choice of Teaching as a Career: The FIT-Choice Project

The recruitment of teachers and their retention within the profession has been the subject of much research attention (Watt & Richardson, 2007). The motives of teacher recruits have commanded interest because there is an interest in attracting recruits to the profession and in retaining them once they have been employed. Cited statistics reveal that across the globe, up to 30% of teachers leave the profession within their first five years (Watt & Richardson, 2007). This is a large attrition rate which might indicate that the expectations of recruits are not being met by their experience of the teaching profession.

Researchers have therefore attempted to measure the motivations of beginning teachers. Many of these studies have been criticised for "an over reliance on single-item indicators, raw frequency counts, and the ranking of themes, resulting in a lack of consistency across studies." (Watt & Richardson, 2007, p 168). These authors have developed the "FIT-Choice" (Factors Influencing Teaching Choice) project, which provides a comprehensive model for describing motivations for choosing teaching that has recently been empirically validated (Watt & Richardson, 2007). The model is firmly theoretically grounded in expectancy-value theory (Eccles et al., 1983) and provides clear definition of the "motivation" construct. While personality variables are implicit in the model, however, the model itself does not make use of any standardised form of personality test. The degree to which personality factors form part of the "motivation" for recruits to enter teaching and how personality factors might

influence the retention of teachers in the profession is therefore not clear in the model.

Watt and Richardson have developed a kind of "type theory" to describe recruits entering teaching (Watt & Richardson, 2008). The first "type" was called "Highly Engaged Persisters". This type was characterised by altruistic statements they made about teaching; they scored highly on four measures of professional engagement: planned effort, planned persistence, professional development aspirations and leadership aspirations. The second type was entitled "Highly Engaged Switchers". These recruits were characterised by responses which indicated a desire for growth and change; their responses were similar to those of the "Highly Engaged Persisters" except that they scored lower on planned persistence. The third type was termed the "Lower Engaged Desisters". These recruits were concerned by the demands of the profession and expressed more concerns with the lack of personal and financial rewards which teaching offers. They scored lowest on all four factors of teacher engagement.

These three different types of teachers each had different intentions regarding their development within the teaching profession. Importantly, their planned longevity within the profession appeared to vary with their "type". It may be that Personality theory can make a contribution to understanding and predicting the types of individuals who are entering the teaching profession. Teachers characterised by altruistic statements they make about teaching, the "Highly Engaged Persisters" might be identified by the NEO PI-R facets of Altruism, and Tender-Mindedness. Both of these facets are part of the Agreeableness factor in the Five Factor model of personality, the very factor which appears to have been "virtually unstudied" (Judge & Ilies, 2002, p. 780).

The FIT-Choice model is very satisfyingly grounded in theory which has substantial empirical foundation. Expectancy-value theorists argue that "individuals' choice, persistence and performance can be explained by their beliefs about how well they do on the activity and the extent to which they value the activity" (Wigfield & Eccles, 2000, p. 68). The expectancy-value motivational model, originally developed to explain students' choices in Mathematics, has been developed to explain choices in other subjects as well, for example, Reading, Music and Sports. It is a significant strength of expectancy-value theory that it has been used both for the choice of academic subjects (Wigfield & Eccles, 2000; Eccles, Adler, & Meece, 1984), and also the choice of a career (Watt, 2006; Watt & Richardson, 2007, 2008). Expectancy-value theorists regard the major determinants of academic choice as the expectancy of success and task value, with antecedent influences of socialisation and previous experience (Watt & Richardson, 2007).

The FIT-Choice researchers developed a scale to measure motivations for teaching based on the constructs of expectancy-value theory. For economy they defined three sets of variables related to "self", "values" and "task". The "self" variable was defined as "self-perceptions of ability". Within the "values" set, component constructs were based on the expectancy-value *Task value* sub-components of "intrinsic value", "subjective attainment value" and "utility value". For "intrinsic value", Watt and Richardson (2007) developed items assessing individuals' interests in teaching. For "subjective attainment value" they developed items asking about how well the career matched personal goals and relabelled this as "personal utility value". The researchers also renamed "utility value" as "social utility value" and developed items eliciting information about the social contribution a teaching career would make (see Watt & Richardson, 2007).

It is in the consideration of "self", "value" and "task" variables that personality theory could make a contribution. How an individual assesses the value of activities, the beliefs and priorities which an individual maintains, and the manner in which an individual behaves in the pursuit of goal attainment, might be mediated by personality. The NEO PI-R defines personality as the individual's emotional, experiential, attitudinal and motivational style (Costa & McCrae, 1992). Indeed, values are measured as a facet within the Openness factor of the Five-Factor model. Consideration of an individual's values and the way in which the individual interacts with the world in applying and revising these values should be partly influenced by personality.

The Present Study

The aim of this study is to establish which personality traits relate to the choice of teaching as a career, and, the extent to which specific personality facets relate to planned effort and persistence in teaching. The specific hypotheses are listed below.

1. Personality variables relate to the choice of teaching as a career.

2. Personality variables relate to planned effort and persistence.

3. A measure of Big-Five factors will not distinguish among teacher recruits.

4. A measure of Big-Five personality facets will distinguish among teacher recruits.

METHOD

Participants

First, four volunteer practising teachers drawn from the three different 'types' who had been teaching for 3 years were interviewed by telephone to ascertain the personality characteristics they thought appropriate for teachers. Second, a cohort of 74 third-year preservice secondary teachers enrolled in a core

Education unit completed a questionnaire tapping planned effort and

persistence factors identified in the FIT-Choice project, and two other personality

tests. The class had a total enrolment of 93 and there were 18 absences on the

day of administration. Of the 75 students present, 74 volunteered to complete the

questionnaire: 23% of the respondents were male and 77% of respondents were

female; 87% came from a home in which English was the main language spoken,

8% from a home in which Chinese was the language, 3% from a home with

another European language, and 1% from a home with another Asian language

(rounding error accounts for 1%). All students but one were in their 20's, one was

aged 42. 25 students were 20 years old and 30 students were 21 years old.

Instruments

Practising teachers were asked to respond to the following five items:

1. What do you see as the personal quality you have that most characterises you

   as a teacher?

2. What is it about you that attracted you to teaching?

3. Tell me what your students like about you.

4. What sorts of personal qualities do you think help keep a person involved in

   teaching over time?

5. What are some of the qualities in other good teachers you have seen you

   would think you share?

The questionnaire completed by preservice teachers included the planned

effort and planned persistence factors from the FIT-Choice scale (Watt &

Richardson, 2007), and two personality instruments. The FIT-Choice factors were

included as outcome measures against which to correlate TIPI and FIPI scores.

The first personality instrument was the Ten-Item Personality Inventory (TIPI) ;

(Gosling, Rentfrow, & Swann, 2003), a measure of the Big Five personality factors

(Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism). It requires respondents to provide a rating based on a 7-point scale ranging from 1 (disagree strongly) to 7 (agree strongly) for items which each consist of two descriptors separated by a comma, using the common stem "I see myself as...". The TIPI is far briefer than many of the other Big-Five Personality Inventories, having only 10 items, in contrast to the NEO PI-R for example which has 240 items. The TIPI is clearly a more parsimonious instrument. Nevertheless, the TIPI has been demonstrated to have adequate convergence with more comprehensive measures (Gosling et al., 2003).

The following Cronbach's alpha coefficients have been reported for each of the factors on the TIPI: Extraversion (alpha = .68), Agreeableness (alpha = .40), Conscientiousness (alpha = .50), Emotional Stability (alpha = .73), Openness to Experience (alpha = .45). Relatively low alpha coefficients have been accepted by these researchers. Their efforts to ensure content validity have led them to argue that the validity of their scale can exceed its reliability (Gosling et al., 2003). The TIPI was normed with a sample of 1,813 undergraduates enrolled in an introductory psychology course at the University of Texas at Austin. Of this sample 65% were female, 35% were male. There was a mixture of ethnicities: Asian, 18.5%; Hispanic, 12.7%; "White", 62.3%; and other ethnicities 6.5% (Gosling et al., 2003).

The second personality measure was purpose designed for this study. Because the focus was on the effectiveness of the facets contained within the overarching factors, a measure of the facets was needed. Because research on the TIPI has suggested that two items were sufficient to provide information on the factors (Gosling et al., 2003), it seemed reasonable to devise a parallel measure having 2 items for each facet. Used in concert with the TIPI it was reasoned that

such an instrument would provide a richness of data on each of the facets as well as reinforcing information provided on the factors provided by the TIPI. Two items for each of the 30 facets resulted in an instrument with 60 items. Modeled on the TIPI format, this instrument similarly required respondents to provide a rating based on a 7-point scale ranging from 1 (disagree strongly) to 7 (agree strongly) for items which each consisted of two descriptors separated by a comma, using the common stem "I see myself as…". The instrument was named the "Facet-Investigation Personality Inventory" (FIPI) and took about 5 minutes to complete.

Analyses

Qualitative data elicited through the four telephone conversations were analysed by comparing key adjectives against the Adjective Check List Correlates of NEO PI-R Facet scales (Costa & McCrae, 1992, p. 49). These adjectives provided an indication of the personality traits which practising teachers thought desirable in teachers. Comparing these responses to the correlates of the NEO PI-R facet scales provided an indication of which facets might be most relevant to the personality traits of teachers.

In the preservice secondary teacher sample, mean responses on each of the facets measured by the FIPI were then compared with the TIPI means for the corresponding factor. It was reasoned that, given that the TIPI provided a factor mean, any facet which differed substantially from the overall factor mean was an important indicator of the differences in responding to its component facets. For example, within the Openness (O) factor, all of the FIPI means were within one standard deviation of the TIPI mean with the exception of responses for O4 Actions, which fell more than one standard deviation below the TIPI mean.

FIT-Choice research has shown that teaching commitment factors are important indicator measures of the choice of teaching as a career. A Principal Components Analysis using Oblimin Rotation with Kaiser Normalisation established that the FIT-Choice planned effort and planned persistence factors were also empirically supported in the present sample: 2 eigenvalues exceeded unity, each explaining 63.9% and 19.9% of the variance, and the Scree plot also supported a two factor solution. Cronbach alpha factor reliabilities were .91 for planned effort and .87 for planned persistence. Bivariate correlations of TIPI and FIPI responses with FIT-Choice planned effort and persistence factors identified which personality factors and facets were associated with each.

RESULTS

Qualitative Data from Interviews

The personality traits practising teachers spontaneously described as necessary or desirable in teachers were often readily classifiable within the facets of the Big-Five model of personality. This preliminary analysis provided an indicator that some personality facets are apparently more salient to teachers than others. Table 2 lists the interview questions and responses alongside the personality facets to which they were matched. These practising teachers indicated that the facets O2 aesthetics, O5 ideas, C2 order, C4 achievement-striving, E1 warmth, A3 altruism, and A6 tender-mindedness, are desirable traits for teachers. They also suggested that the facets N2 angry-hostility and N3 depression are undesirable traits.

< INSERT TABLE 2 HERE >

There is some value in considering those traits which the teachers did *not* mention. Within the extraversion factor, for example, warmth was commonly referred to, but there were no references to E3 assertiveness, E4 activity, or E5

excitement-seeking. It is entirely possible that these facets were not mentioned by simple omission; alternatively, it might be an indicator that, within the broad factors, there are specific facets which are more applicable to teachers.

The Ten-Item Personality Inventory (TIPI)

Mean responses of the 74 undergraduate secondary teacher trainees on the Five Factors as measured by the TIPI were compared to the TIPI norms (Gosling et al., 2003). This procedure indicated that participants responded in much the same way as the norming group had (within 1 s.d.). This may not be surprising, since the TIPI was normed using psychology students; students considering entering teaching, another of the "helping professions", may be likely to share similar personality traits. Comparative means and standard deviations between the original sample from the University of Texas and the participants in the present study are presented in Figure 1, for each of the Big-Five Personality factors.

< INSERT FIGURE 1 HERE >

The Facet-Investigation Personality Inventory (FIPI)

The FIPI was administered in the survey following the TIPI items. A summary of means for each facet follows in Table 3. With the exception of O4 *actions,* where the responses were significantly lower, all of the facet means were within one standard deviation of the mean for the Openness (O) factor (represented by the horizontal line in Figure 2).

< INSERT TABLE 3 HERE >< INSERT FIGURE 2 HERE >

All of the facet means within the Conscientiousness (C) factor were also within one standard deviation from the C factor mean (see Figure 3).

< INSERT FIGURE 3 HERE >

Most of the facet means within the Extraversion (E) factor were within one standard deviation of the E factor mean. Warmth was significantly higher at 5.9 and Gregariousness and Positive Emotions were elevated at 5.7 and 5.2 respectively (see Figure 4).

< INSERT FIGURE 4 HERE >

All of the facet means within the Agreeableness (A) factor were within one standard deviation from the A factor mean, except for the facet Modesty which, at 4.11, was one standard deviation below the A factor mean (see Figure 5).

< INSERT FIGURE 5 HERE >

All of the Neuroticism (N) facet means were significantly lower than the N factor mean (see Figure 6).

< INSERT FIGURE 6 HERE >

The means of facets within the Neuroticism factor were all relatively low. All other means ranged in value between minimum values of 4.1 for O4 Actions and 4.1 for A5 Modesty, and maximum values of 5.8 for C3 Dutifulness and 5.7 for E2 Gregariousness. Several of the facets were statistically significantly skewed ($p <$ .05): The Neuroticism facets were significantly positively skewed, indicating a clustering of relatively low scores for N2 Angry Hostility and N3 Depression. Several facets of the other factors showed significant negative skewness, indicating a clustering of higher scores, for E1 Warmth, E2 Gregariousness, A2 Straightforwardness and A3 Altruism. Highest facet means were exhibited on the following facets:

	M	$s.d.$
• C1 Competence	5.55	1.05
• C3 Dutifulness	5.76	1.11
• C4 Achievement-Striving	5.68	1.21

- C5 Self-Discipline   5.13   1.49

- E1 Warmth   5.92   1.12

- E2 Gregariousness   5.71   1.32

- E6 Positive Emotions   5.52   1.15

- A2 Straightforwardness   5.71   1.32

- A3 Altruism   5.50   1.11

- A6 Tender-Mindedness   5.29   1.20

In contrast, preservice teacher participants scored relatively low on the following facets: A5 Modesty (M = 4.11, *s.d.* = 0.92), N1 Anxiety (M = 2.65, *s.d.* = 1.18), N2 Angry Hostility (M = 2.06, *s.d.* = 1.24), and N3 Depression (M = 2.19, *s.d.* = 1.35).

Comparison of TIPI and FIPI

The FIPI results demonstrated far more variability than the TIPI results, and can therefore be used to provide a more differentiated picture of the respondents. Since the TIPI measures the Big-Five factors, it would appear that factor measures are too insensitive to detect what are more finely-grained differences for respondents. By contrast, FIPI responses indicated that some facets may be important personality markers for future teachers. It is instructive to examine the results on the Conscientiousness and Extraversion Factors as measured by the TIPI and compare them with the results for the Conscientiousness and Extraversion facets as measured by the FIPI.

Within the Conscientiousness Factor as a whole, participants showed a marked elevation of scores for the facets of Competence, Dutifulness, Achievement-Striving and Self-Discipline; they were less likely to indicate Order or Deliberation. Similarly, within the Extraversion Factor there was a marked elevation of scores on the Warmth, Gregariousness and Positive Emotions facets,

but no particular elevation on the Assertiveness, Activity and Excitement-Seeking facets. This pattern of responding demonstrates that a whole factor might show no particular elevation while there is marked variation among its facets.

Relationships with Teaching Commitment Factors

Teaching commitment factors from the FIT-Choice scale (Watt & Richardson, 2007) were included to determine which aspects of personality were related to participants' planned effort or planned persistence. Spearman's rho was chosen because of the significantly skewed distributions. Significant correlations ($p < 0.05$, 2-tailed) were identified with *planned effort* and the TIPI factors Agreeableness (*rho* = .234) and Conscientiousness (*rho* = .266); and significant relationships with *planned persistence* and the TIPI factors Agreeableness (*rho* = .294) and Conscientiousness (*rho* = .233). This would suggest that while the TIPI factors of Agreeableness and Conscientiousness correlate with two factors related to teaching commitment, the Big-Five personality factors might not be useful in distinguishing types of people who score highly on *planned effort* vs. *planned persistence.*

< INSERT TABLE 4 HERE >

Correlations between FIPI ratings and the planned effort and planned persistence factors are shown in Table 4. These results suggest that respondents in this sample who scored higher on *planned effort* were higher on Deliberation and reported less Impulsiveness. Respondents who scored higher on *planned persistence* were higher on Feelings and Trust. It might be that these personality facets are what distinguish between the outcomes related to effort vs. persistence in teaching. While the TIPI did not distinguish between the two different kinds of teaching commitment factors, the FIPI did. This suggests that the more finely-

grained facet analysis might be useful in distinguishing groups which could otherwise be mistaken as similar.

DISCUSSION & CONCLUSION

Telephone conversations with practising teachers about desirable personality traits provided responses readily classifiable into facets of the Big-Five personality factors. However, a measure of the Big-Five factors alone did not provide data to distinguish teacher recruits from the norming population. By contrast, a measure devised to reflect the facets of the Big-Five factors indicated that prospective teachers scored high on the following facets: competence, dutifulness, achievement-striving, self-discipline (facets of the Conscientiousness factor); warmth, gregariousness, positive emotions (facets of the Extraversion factor); straightforwardness, altruism, compliance and tender-mindedness (facets of the Agreeableness factor). Scores were low on: modesty (a facet of the Agreeableness factor); anxiety, angry hostility and depression (facets of the Neuroticism factor), supporting hypothesis one. High scoring facets also correlated with teaching commitment factors of planned effort and planned commitment, supporting hypothesis two.

As previous research suggests, a general measure of the Five Factors (TIPI) did not identify personality characteristics specific to teacher recruits, supporting hypothesis three. In contrast, the measure devised to measure facets within the factors (FIPI) did indicate personality traits which appeared to characterise teachers supporting hypothesis four. These results support conclusions advanced by previous researchers that specific facet scales might predict behavior more accurately than the Big-Five factors (Paunonen & Ashton, 2001; Paunonen, Rothstein, & Jackson, 1999).

Researchers conducting investigations based on both motivation theory and personality can enrich their understanding by considering the overlap between these two theoretical approaches. While motivational researchers clearly assume the importance of personality traits such as 'altruism' they might be assisted by use of the specific facet measures provided by the NEO PI-R. Similarly, personality researchers considering the structure of the factors might be assisted by more overt consideration of the role of motivation. Indeed, the relationship between motivation and the five-factor model of personality needs systematic investigation. Specific measurement of the facets rather than reliance on the broader factors might also be of assistance to a wide range of educational, welfare and employment agencies for whom understanding and predicting decision-making and behavior of their clients is of critical importance.

Decision making processes are by their nature extremely complex. Each decision has an effect on subsequent decisions. As part of this investigation into the career choice of teachers, data was collected on their choice of subjects in secondary school. Preliminary indications are that personality has an influence on subject choice and it is likely that subject choice has an influence on career direction. Further investigation of the influences on subject choice might illuminate the way in which personality influences decisions over time.

These results indicate that personality traits may be an important contributor to the decision to choose teaching as a career. Tests designed to measure personality facets are likely to be useful as a guide to individuals considering pursuing teaching.

References

Colquitt, J.A. & Simmering, M.J. (1998). Conscientiousness, goal-orientation and motivation to learn during the learning process: a longitudinal study. *Journal of Applied Psychology, 83,* 654-665.

Costa, P.T. & McCrae, R. R. (1992). *NEO PI-R professional manual.* Psychological Assessment resources: New York.

Eccles, J.S., Adler, T. & Meece, J.L. (1984). Sex-differences in achievement: a test of alternate theories. *Journal of Personality and Social Psychology, 46,* 26-43.

Eccles, J.S., Wigfield, A., Flanagan, C.A., Miller, C., Reuman, D.A., & Yee, D. (1989). Self-concepts, domain values, and self-esteem: Relations and changes at early adolescence. *Journal of Personality, 57,* 2283-310.

Gosling, S.D., Rentfrow, P.J., & Swann, W.B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality, 37,* 504-528.

Hurtz, G.M., & Donovan, J.J. (2000). Personality and job performance: The big five revisited. *Journal of Applied Psychology, 85,* 869-879.

Judge, T.A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology, 87,* 797-807.

Murphy, P.K., & Alexander, P.A. (2000). A motivated exploration of motivation terminology. *Contemporary Educational Psychology, 25,* 3-53.

Paunonen, S.V., and Ashton, M.C. (2001). Big five factors and facets and the prediction of behaviour. *Journal of Personality and Social Psychology, 81,* 524-539.

Paunonen, S.V., Rothstein, M.G., & Jackson, D.N. (1999). Narrow reasoning about the use of broad personality measures for personnel selection. *Journal of Organizational Behavior, 20,* 389-406.

Ryan, M.R. & Deci, E.L., (2000). Intrinsic and extrinsic motivations: Classic definitions and new definitions. *Contemporary Educational Psychology, 25,* 54-67.

Schmit, M.J. & Ryan, A.M., (1993). The Big Five in personnel selection: Factor structure in applicant and non-applicant populations. *Journal of Applied Psychology, 78,* 966-974.

Schmitt, N.W., Gooding, R.Z., Noe, R.A., & Kirsch, M. (1984). Meta-analyses of validity studies published between 1964 and 1982 and the investigation of study characteristics. *Personnel Psychology, 37,* 407-422.

Van Yperen, N.W. (2006). A novel approach to assessing achievement goals in the context of the 2X2 framework: Identifying distinct profiles of individuals with different achievement goals. *Personality and Social Psychology Bulletin, 32,* 1432-1445.

Vroom, V.H., (1962). Ego-Involvement, job satisfaction and performance. *Personnel Psychology, 15,* 159-177.

Vroom, V.H., (1964). *Work and Motivation.* Wiley: New York.

Watt, H.M.G. (2006). The role of motivation in gendered educational and occupational trajectories related to math. *Educational Research and Evaluation, 12,* 305-322.

Watt, H.M.G., & Richardson, P.W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction, 18,* 408-428.

Watt, H.M.G., Richardson, P.W., & Tysvaer, N.M. (2007). Profiles of beginning teachers professional engagement and career development aspirations. In A. Berry, A. Clemans, & A. Kostogriz (Eds.), *Changing Perspectives on Professional Learning: Professionalism, identities and practice.* (pp. 1-16). Rotterdam, the Netherlands: Sense Publishers.

Watt, H.M.G. & Richardson, P.W. (2007). Motivational factors influencing teaching as a career choice. *Journal of Experimental Education, 75, 167-202.*

Wigfield, A., & Eccles, J.S. (2000). Expectancy-Value theory of achievement motivation. *Contemporary Educational Psychology, 25,* 68-81.

Table 1

Structure of Five-Factor Model of Personality

Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Fantasy	Competence	Warmth	Trust	Angry Hostility
Aesthetics	Order	Gregariousness	Altruism	Self-Consciousness
Feelings	Dutifulness	Assertiveness	Straightforwardness	Anxiety
Actions	Achievement-Striving	Activity	Tender-Mindedness	Vulnerabliity
Ideas	Self-Discipline	Excitement-Seeking	Modesty	Depression
Values	Deliberation	Positive Emotions	Compliance	Impulsiveness

Table 2

Interview Questions and Grouped Responses

Stimulus Question	Elicited Words	Relevant Facet: Adjective
What do you see as the quality you have that most characterises you as a teacher?	Enjoy learning	O5 Ideas: curious
	Compassionate	A3 Altruism: soft-hearted
	High Expectations	No apparent facet
	Adaptable	O2 Aesthetics: versatile
	Willing to learn	O5 Ideas: curious
What is it about you that attracted you to teaching?	Working with kids	E1 Warmth: sociable
	Working with people	E1 Warmth: sociable
	Social justice	O5 Ideas: idealistic
	Curiosity	O5 Ideas: curious
Tell me what your students like about you?	I'm fun	O1 Fantasy: humorous
	Creative	O5 Ideas: imaginative
	Resourceful	O2 Aesthetics: versatile
	Approachable	E1 Warmth: friendly
	Even-tempered	N2 Angry Hostility: irritable
	Challenging	No apparent facet
What sorts of personal qualities keep a person involved in teaching over time?	Love of learning	O5 Ideas: curious
	Adaptable	O2 Aesthetics: versatile
	Ability to 'let go'	N3 Depression: confident

	Perseverance	C2 Order: thorough
	Like the young	E1 Warmth: sociable
	teaching philosophy	No apparent facet
	Creativity	O5 Ideas: imaginative
What are some of the qualities in some other good teachers you have seen would you think you share?	Different	O5 Ideas: original
	Thorough	C2 Order: thorough
	Dedicated	C4 Achievement-striving
	Warmth	E1 Warmth: warm
	commitment to "whole child"	No apparent facet

Table 3

FIPI Facet Means

Facets	*M*	*s.d.*
OPENNESS		
O1 fantasy	4.91	1.19
O2 aesthetics	4.61	1.90
O3 feelings	4.96	1.24
O4 actions	4.10	0.93
O5 ideas	4.75	1.09
O6 values	5.20	0.88
CONSCIENTIOUSNESS		
C1 competence	5.55	0.89
C2 order	4.70	1.50
C3 dutifulness	5.76	0.91
C4 achievement-striving	5.68	1.03
C5 self-discipline	5.13	1.29
C6 deliberation	5.10	1.07
EXTRAVERSION		
E1 warmth	5.92	1.01
E2 gregariousness	5.71	1.12
E3 assertiveness	4.47	1.17
E4 activity	4.78	1.02
E5 excitement-seeking	4.71	1.12
E6 positive emotions	5.52	1.09
AGREEABLENESS		
A1 trust	5.23	1.11
A2 straightforwardness	5.53	1.09
A3 altruism	5.57	0.96
A4 compliance	5.39	0.95
A5 modesty	4.11	0.92
A6 tender-mindedness	5.29	1.05
NEUROTICISM		
N1 anxiety	2.65	1.18
N2 angry hostility	3.09	1.69
N3 depression	2.19	1.25
N4 self-consciousness	2.93	1.21
N5 impulsiveness	3.53	1.23
N6 vulnerability	3.10	0.99

Table 4

Correlation of FIPI with FIT-Choice Teaching Commitment Factors (p < .05)

FACTOR Facet	PLANNED EFFORT *Rho*	PLANNED PERSISTENCE *Rho*
OPENNESS		
O1 fantasy	n.s.	n.s.
O2 aesthetics	n.s.	n.s.
O3 feelings	n.s.	.234
O4 actions	n.s.	n.s.
O5 ideas	n.s.	n.s.
O6 values	.280	.250
CONSCIENTIOUSNESS		
C1 competence	.459	.310
C2 order	.242	.317
C3 dutifulness	.620	.430
C4 achievement striving	.444	.429
C5 self-discipline	.513	.362
C6 deliberation	.430	n.s.
EXTRAVERSION		
E1 warmth	.354	.340
E2 gregariousness	n.s.	n.s.
E3 assertiveness	n.s.	n.s.
E4 activity	n.s.	n.s.
E5 excitement-seeking	n.s.	n.s.
E6 positive emotions	.267	.246
AGREEABLENESS		
A1 trust	n.s.	.299
A2 straightforwardness	.277	.330
A3 altruism	.408	.313
A4 compliance	.310	.272
A5 modesty	n.s.	n.s
A6 tender-mindedness	.352	.455
NEUROTICISM		
N1 anxiety	n.s.	n.s
N2 angry hostility	-.292	-.382
N3 depression	n.s.	n.s.
N4 self-consciousness	n.s.	n.s.
N5 impulsiveness	-.334	n.s.
N6 vulnerability	-.333	-.281
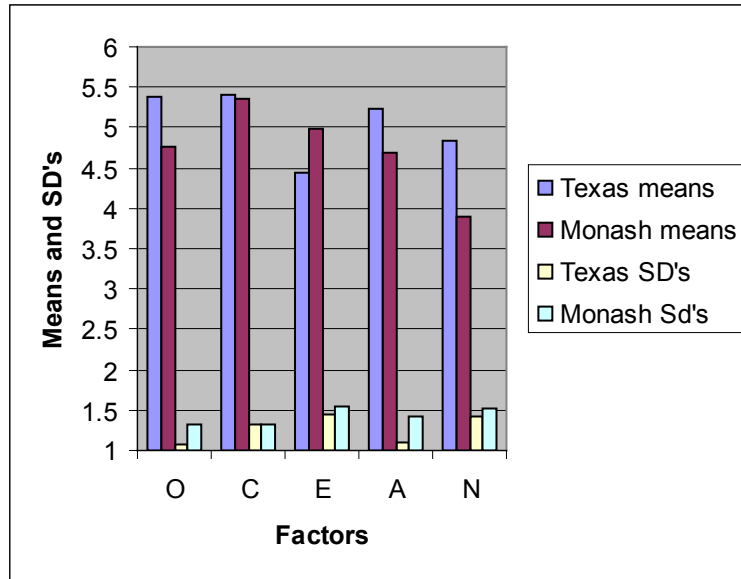
Key: O=Openness, C=Conscientiousness, E=Extraversion, A=Agreeableness, N=Neuroticism

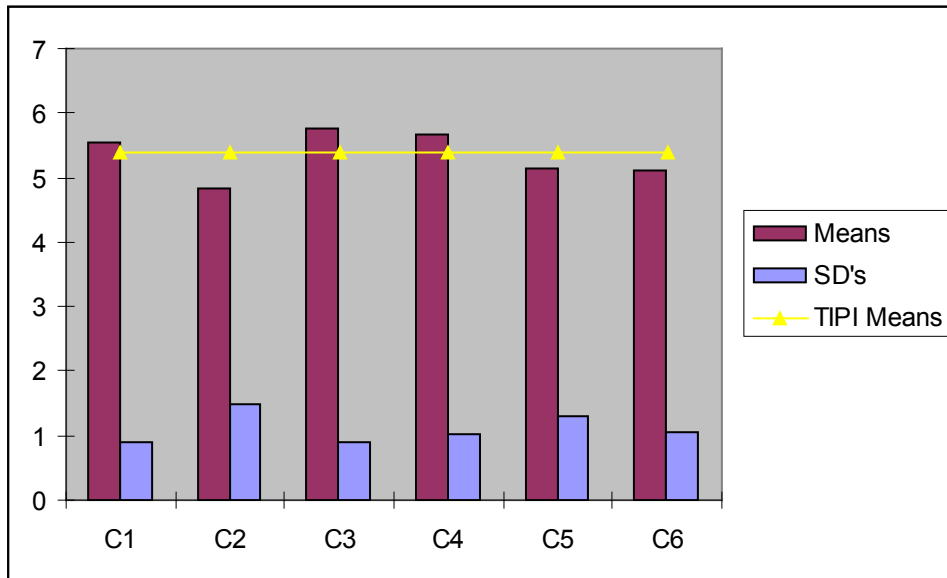*Figure 1.* TIPI means for the Texas vs. current samples.
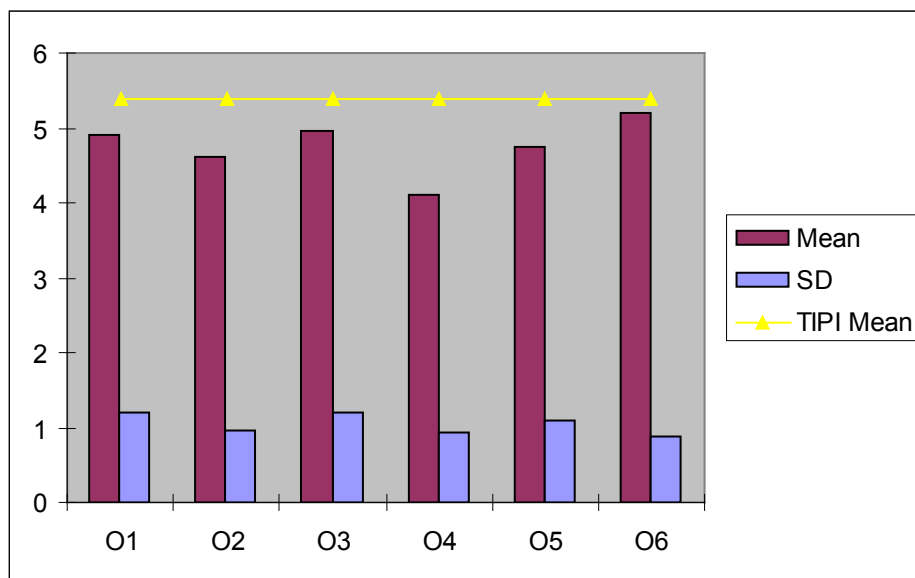
Y axis includes 0 value to accommodate SD value of less than 1.

Key: 01 fantasy; O2 aesthetics, O3 feelings; O4 actions; O5 ideas; O6 values

TIPI Mean Openness: 5.38; SD 1.07

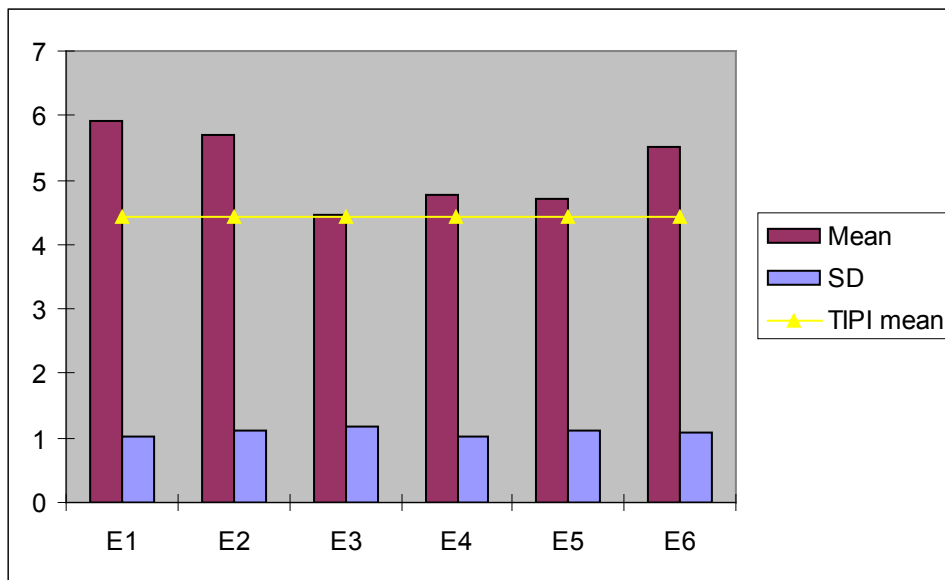*Figure 2.* Openness facets means and SD's.

Y axis includes 0 value to accommodate SD value of less than 1.

Key: C1 competence; C2 order; C3 dutifulness; C4 achievement-striving; C5 self-discipline; C6 deliberation.

TIPI Mean All Conscientiousness: 5.40

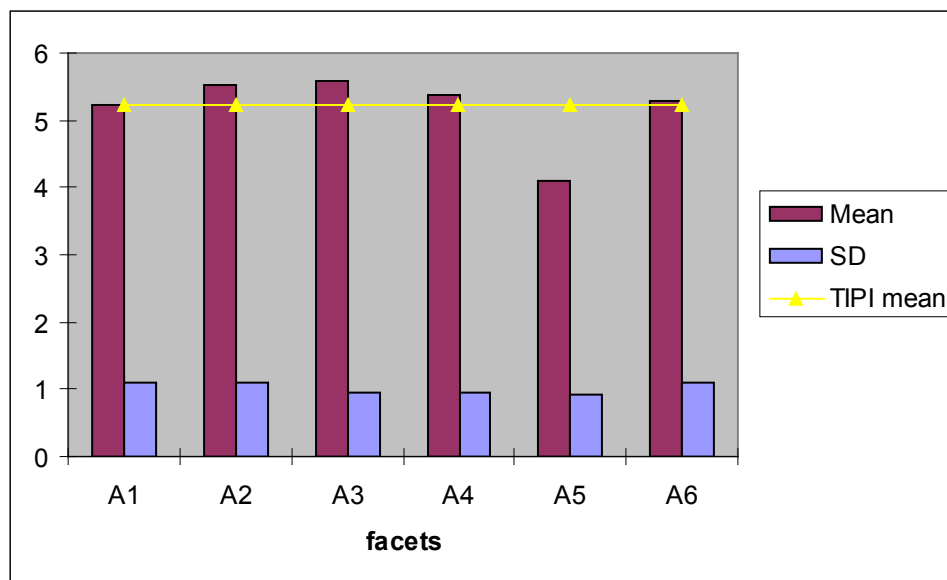*Figure 3.* Conscientiousness facets means and SD's.

Y axis includes 0 value to accommodate SD value of less than 1.

Key: E1 warmth; E2 gregariousness, E3 assertiveness; E4 activity; E5 excitement-seeking; E6 positive emotions.

TIPI Mean All Extraversion: 4.44; SD 1.45

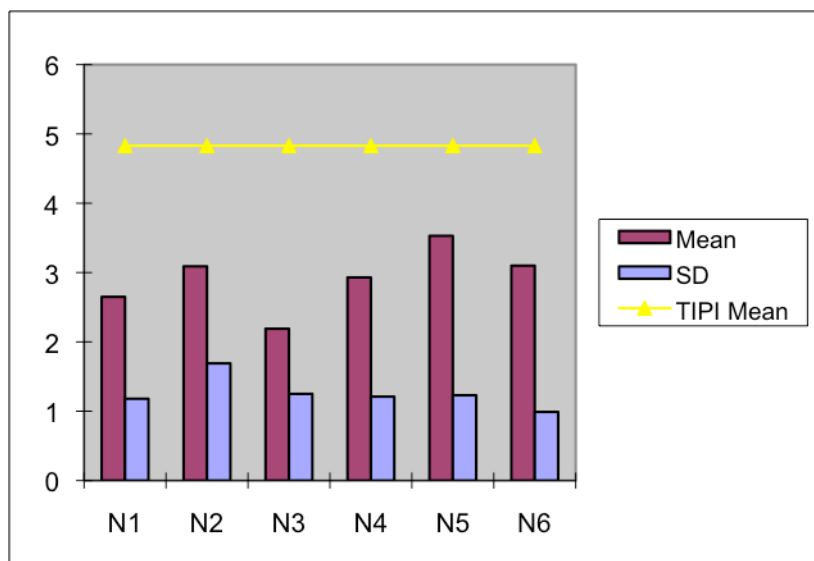*Figure 4.* Extraversion facets means and SD's.

Y axis includes 0 value to accommodate SD value of less than 1.

Key: A1 trust; A2 straightforwardness; A3 altruism; A4 compliance; A5 modesty;

A6 tender-mindedness

TIPI Mean All Agreeableness: 5.23; SD 1.11

Figure 5. Agreeableness facets means and SD's.

Key: N1 anxiety; N2 angry hostility; N3 depression; N4 self-consciousness; N5 impulsiveness, N6 vulnerability.

TIPI Mean Neuroticism: 4.83; SD 1.4

Figure 6. Neuroticism facets means and SD's.