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Work-related psychological health and psychological type: A study
among primary school teachers in Wales

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Abstract

This study examines the connection between the balanced-affect model of work-related psychological health and psychological type among a sample of 260 primary school teachers in Wales. This sample of teachers comprised more extraverts (59%) than introverts (41%), more sensing types (77%) than intuitive types (23%), more feeling types (60%) than thinking types (40%), and more judging types (90%) than perceiving types (10%). The data demonstrated that introverts experienced higher levels of emotional exhaustion than extraverts (negative affect) and that intuitive types and feeling types experienced higher levels of satisfaction in teaching than sensing types and thinking types (positive affect). The implications of these findings are discussed for promoting good work-related psychological health among primary school teachers.

Keywords: Psychological type, burnout, satisfaction, teachers

Introduction

Poor work-related psychological health has been a matter of practical importance and theoretical concern within the caring professions for a number of years. It is of practical importance both in light of absenteeism and sickness caused by poor work-related psychological health, and in light of impaired professional performance that accompanies poor work-related psychological health. It is of theoretical concern both in terms of establishing appropriate definition and assessment of work-related psychological health, and in terms of establishing the correlates, antecedents and consequences of individual differences in work-related psychological health. Teachers constitute one of the caring professions central to this discussion.

Work-related psychological health

One of the best established conceptualisations and operationalisations of work-related psychological health is provided by the Maslach Burnout Inventory as proposed by Maslach and Jackson (1986). The Maslach Burnout Inventory assesses work-related psychological health across three domains according to which professional burnout is characterised by high scores of emotional exhaustion, high scores of depersonalisation, and low scores of personal accomplishment.

In the original form of the Maslach Burnout Inventory, emotional exhaustion is assessed by a nine-item subscale. The items describe feelings of being emotionally overextended and exhausted by one's work. The item with the highest factor loading on this dimension is one referring directly to burnout, 'I feel burned out from my work.' Depersonalisation is assessed by a five-item subscale. The items describe an unfeeling and impersonal response towards the individuals in one's care. An example item on this dimension is 'I feel I treat some recipients as if they were impersonal objects.' Personal accomplishment is assessed by an eight-item subscale. The items describe feelings of

competence and successful achievement in one's work with people. An example item on this dimension is 'I feel I'm positively influencing other people's lives through my work.'

The Maslach Burnout Inventory has been employed in a number of studies among teachers across a range of cultural contexts, including Australia (Goddard, O'Brien, & Goddard, 2006; McCormick & Barnett, 2011), Brazil (Santana, De Marchi, Junior, Girondoli, & Chiappeta, 2012), China (Yu, Wang, Zhai, Dai, & Yang, 2015), Georgia (Bitsadze & Japaridze, 2016), Greece (Koustelios, 2001), India (Sachdeva & Narwal, 2015), Iran (Pishghadan & Sahebjam, 2012), Japan (Yatsunami & Arai, 2001), Latvia (Zakrizevska, 2015), The Netherlands (Schaufeli, Daaman, & Meirlo, 1994), Norway (Skaalvik & Skaalvik, 2014), South Africa (Nthebe, Barkhuizen, & Schutte, 2016), Spain (Guerrero, Gomez, & Moreno, 2011), Turkey (Ertürk & Keçecioglu, 2012), United Kingdom (Covell, McNeil, & Howe, 2009; Moneta, 2011) and United States of America (Abel & Sewell, 1999; Jennett, Harris, & Mesibov, 2003).

As appropriate in light of its extensive use across the caring professions, the Maslach Burnout Inventory has been subject to close scrutiny from both empirical and conceptual perspectives. One of the key theoretical problems with the Maslach model of burnout concerns giving an account of the relationship between the three components (emotional exhaustion, depersonalisation, and lack of personal accomplishment). One account of this relationship is in terms of a sequential progression, according to which emotional exhaustion leads to depersonalisation and depersonalisation leads to loss of personal accomplishment.

Challenging the adequacy of the empirical foundations for this sequential model and recognising the apparent independence of personal accomplishment from the other two components (emotional exhaustion and depersonalisation), Francis, Kaldor, Robbins, and Castle (2005) revisited the insights of Bradburn's (1969) classic notion of 'balanced affect' in order to give a coherent account of the observed phenomena of poor work-related

psychological health. Drawing on Bradburn's notion of balanced affect, they proposed a model of work-related psychological health according to which positive affect and negative affect are not opposite ends of a single continuum, but two separate continua. According to this model it is reasonable for individuals to experience at one and the same time high levels of positive affect and high levels of negative affect. According to this model of balanced affect, warning signs of poor work-related psychological health occur when *high* levels of negative affect coincide with *low* levels of positive affect.

Francis, Kaldor, Robbins, and Castle (2005) tested this balanced affect approach to work-related psychological health in an international study conducted among clergy in Australia, New Zealand, and the United Kingdom. For research among clergy they translated the notion of negative affect into emotional exhaustion (measured by the Scale of Emotional Exhaustion in Ministry: SEEM), and the notion of positive affect into ministry satisfaction (measured by the Satisfaction in Ministry Scale: SIMS). Put together, these two 11-item scales form the Francis Burnout Inventory (FBI).

The Scale of Emotional Exhaustion in Ministry drew together items expressing lack of enthusiasm for ministry, frustration, impatience, negativity, cynicism, inflexibility, profound sadness, the sense of being drained and exhausted by the job, and withdrawal from personal engagement with the people among whom ministry is exercised. The Satisfaction in Ministry Scale drew together items expressing personal accomplishment, personal satisfaction, the sense of dealing effectively with people, really understanding and influencing people positively, being appreciated by others, deriving purpose and meaning from ministry, and being glad that they entered ministry.

The internal consistency reliability and construct validity of the two component scales of the Francis Burnout Inventory were tested and supported in a study by Francis, Village, Robbins, and Wulff (2011). More importantly, this study has tested and

supported the balanced affect model of work-related psychological health by demonstrating how high levels of positive affect serve to offset high levels of negative affect in order to maintain a form of psychological equilibrium. Although a relatively new measure, the Francis Burnout Inventory has already been included in a number of studies concerning clergy work-related psychological health, including Francis, Wulff, and Robbins (2008), Francis, Robbins, Kaldor, and Castle (2009), Robbins and Francis (2010), Brewster, Francis, and Robbins (2011), Francis, Gubb, and Robbins (2012), Robbins, Francis and Powell (2012), Barnard and Curry (2012), Randall (2013a, 2013b, 2015), Francis, Robbins, and Wulff (2013a, 2013b), Robbins and Francis (2014), Francis, Laycock, and Brewster (2015), Sterland (2015), Francis and Crea (2015), and Durkee-Lloyd (2016).

Research aim one

Against this background, the first aim of the present study is to test the balanced-affect model of work-related psychological health operationalised for use among clergy by Francis, Kaldor, Robbins, and Castle (2005) among a different population, namely primary school teachers in Wales. This aim requires the adaption of the two measures to reflect the requirements and experiences of the teaching profession. The Scale of Emotional Exhaustion in Ministry (SEEM) becomes The Scale of Emotional Exhaustion in Teaching (SEET); and the Satisfaction in Ministry Scale (SIMS) becomes the Satisfaction in Teaching Scale (SITS).

Psychological type

The balanced-affect model of work-related psychological health, as operationalised for use among clergy by Francis, Kaldor, Robbins, and Castle (2005), has been employed in a range of studies to map the personal, psychological, theological and contextual predictors of individual difference in work-related psychological health

and professional burnout. One of the most consistent findings from this body of empirical research concerns the connection between personality and work-related psychological health. In this connection, the model of psychological type theory has emerged as particularly fruitful among clergy.

Psychological type theory was originally proposed by Carl Jung (1971) and subsequently developed and modified by a series of type indicators, temperament sorters, and type scales, including the Myers-Briggs Type Indicator (MBTI: Myers, McCaulley, Quenk, & Hammer, 1998) and the Francis Psychological Type Scales (FPTS: Francis, 2005). Psychological type theory has been widely used in studies concerned with the psychology of clergy (for review see Francis, 2009).

At its core, psychological type theory suggests that individuals differ in terms of four bipolar preferences: two orientations, two perceiving functions, two judging functions, and two attitudes toward the outer world. Taken together, these four bipolar preferences generate 16 discrete psychological types. The two orientations are defined as introversion (I) and extraversion (E). Introverts draw their energy from the inner world of ideas, while extraverts draw their energy from the outer world of people and things. The two perceiving functions are defined as sensing (S) and intuition (N). Sensing types perceive their environment through their senses and focus on the details of the here and now, while intuitive types perceive their environment by making use of the imagination and inspiration. The two judging functions are defined as thinking (T) and feeling (F). Thinking types reach their judgements by relying on objective logic, while feeling types reach their judgements by relying on subjective appreciation of the personal and interpersonal factors involved. The two attitudes toward the outer world are defined as judging (J) and perceiving (P). Judging types use their preferred judging function (either thinking or feeling) to deal with the outside world. Their outside world is organised,

scheduled, and planned. Perceiving types use their preferred perceiving function (either sensing or intuition) to deal with the outside world. Their outside world is flexible, spontaneous, and unplanned.

Taken together, these four bipolar preferences generate 16 complete psychological types. The combination of the four bipolar preferences also enables individuals' strongest or 'dominant' psychological function to be identified: the dominant sensing type emerges as the practical person; the dominant intuitive type emerges as the imaginative person; the dominant feeling type emerges as the humane person; and the dominant thinking type emerges as the logical person. For introverts, the dominant function is exercised in their inner world, whereas for extraverts the dominant function is exercised in their outer world.

In the wider research literature concerning psychological type, some evidence has been produced linking psychological type with individual differences in work-related psychological health. For example, Reid (1999) reviewed a series of four unpublished doctoral dissertations and one published study which had assessed the relationship between psychological type and scores recorded on the Maslach Burnout Inventory. The stable finding across four of these five studies was that individuals with a preference for extraversion appeared to be less prone to burnout than people with a preference for introversion. More detailed findings reported by Lemkau, Purdy, Rafferty, and Rudisill (1988) noted that extraverts recorded significantly higher scores on personal accomplishment than introverts, that thinkers recorded significantly higher scores on depersonalisation than feelers, and that judgers recorded significantly higher scores on emotional exhaustion than perceivers. Findings reported by Myers, McCaulley, Quenk, and Hammer (1998, p. 238) noted that introverts recorded significantly higher scores than extraverts on emotional exhaustion and on depersonalisation.

Building on the work of Francis, Kaldor, Robbins, and Castle (2005), a series of nine studies have explored the connection between the two measures of emotional exhaustion in ministry and satisfaction in ministry assessed by the Francis Burnout Inventory and the four components of psychological type (the two orientations, the two perceiving functions, the two judging functions, and the two attitudes) as assessed by the Francis Psychological Type Scales (Francis, 2005). These studies have been conducted among 748 clergy serving in the Presbyterian Church (USA) by Francis, Wulff, and Robbins (2008), among 3,715 clergy from Australia, England and New Zealand by Francis, Robbins, Kaldor, and Castle (2009), among 521 clergy serving in rural ministry in the Church of England by Brewster, Francis, and Robbins (2011), among 874 clergywomen serving in the Church of England by Robbins and Francis (2010), among 134 lead elders within the Newfrontiers network of churches serving in the United Kingdom by Francis, Gubb, and Robbins (2012), among 212 Australian clergywomen drawn from 14 denominations or streams of churches by Robbins, Francis, and Powell (2012), among 266 clergymen serving in the Church in Wales by Francis, Payne, and Robbins (2013), among 155 Catholic priests serving in Italy by Francis and Crea (2015), and among 589 Canadian Baptist clergy by Durkee-Lloyd (2016).

In terms of emotional exhaustion all nine studies reported significantly higher scores recorded by introverts than by extraverts. Five of the nine studies also reported significantly higher scores recorded by thinking types than by feeling types. One of the nine studies reported significantly higher scores recorded by perceiving types than by judging types. In terms of satisfaction in ministry, eight of the nine studies reported significantly higher scores recorded by extraverts than by introverts. Five of the nine studies also reported significantly higher scores recorded by feeling types than by thinking types. Three of the nine studies reported significantly higher scores recorded by intuitive types than by sensing types. The

clearest message from these findings is that extraverts and feeling types fare better in ministry than introverts and thinking types.

Research aim two

Against this background, the second aim of the present study is to explore the connection between work-related psychological health and psychological type among primary school teachers in Wales. This aim requires exploring the new measures provided by the Scale of Emotional Exhaustion in Teaching (SEET) and the Satisfaction in Teaching Scale (SITS) alongside the Francis Psychological Type Scales (FPTS).

Method

Procedure

As part of an in-service developmental programme among primary school teachers working in state-maintained Anglican schools in Wales conducted by one of the authors, participants were invited to complete a **hard-copy** questionnaire **during the course of the programme**. **The study was conducted in accordance with the British Psychological Society's Code of Ethics (British Psychological Society, 2009)**. Participants were assured of anonymity and freedom not to take part in the study. No incentive or reward was offered for participation. Over 90% of the participants accepted the invitation to participate in the project, providing thoroughly completed responses from 260 participants.

Participants

Of the total of 260 primary school teachers, 44 were male and 216 female, 57 were in their twenties, 62 in their thirties, 65 in their forties, 74 in their fifties, and 2 in their sixties; 83 were in senior management positions, 33 were in middle management positions, 118 were in main grade positions, and 26 were recently qualified. The majority had entered the teaching profession as their first career (197), with the remaining 63 transferring from some other form of employment.

Measures

Psychological type was assessed by the Francis Psychological Type Scales (FPTS: Francis, 2005). This 40-item instrument comprises four sets of 10 forced-choice items related to each of the four components of psychological type: introversion *or* extraversion; sensing *or* intuition; thinking *or* feeling; and judging *or* perceiving. Village (2015) reported the following alpha coefficients (Cronbach, 1951) for these scales: E/I = .79, S/N = .74, F/T = .71, and J/P = .76.

Work-related psychological health was assessed by two scales modified from the Francis Burnout Inventory (FBI) developed by Francis, Kaldor, Robbins, and Castle (2005) for use among clergy. This 22-item instrument comprises the 11-item Scale of Emotional Exhaustion in Teaching (SEET) and the 11-item Satisfaction in Teaching Scale (SITS). Each item is rated on a five-point scale: agree strongly, agree, not certain, disagree, and disagree strongly. Francis, Kaldor, Robbins, and Castle (2005) reported the following alpha coefficients (Cronbach, 1951) for the original measures: Scale of Emotional Exhaustion in Ministry = .84, Satisfaction in Ministry Scale = .84.

Analysis

The scientific literature concerned with psychological type has developed distinctive ways of analysing and presenting data. These conventions are reflected in the following tables. First, the conventional format of 'type' tables has been used in the present paper (see table 1) to allow the type profile generated by this sample of teachers to be compared with other relevant studies in the literature. Type tables present the 16 complete types generated by the four components of psychological type theory. Second, the analysis that sets psychological type alongside work-related psychological health respects the basic Jungian theory by exploring the binary categories of typology rather than correlational associations. Men and women have been treated together in these analyses because there are insufficient

men within the sample to sustain independent analyses by sex.

Results

The four scales of the Francis Psychological Type Scales functioned with a good level of internal consistency reliability as reported by the alpha coefficient (Cronbach, 1951): introversion-extraversion, $\alpha = .80$; sensing-intuition, $\alpha = .65$; thinking-feeling, $\alpha = .66$; and judging-perceiving, $\alpha = .71$.

Table 1 presents the type distribution for the 260 primary school teachers. This table is presented in the format well-established in the literature concerned with psychological type in order to enable detailed comparisons to be made between the present data and other data presented in the recognised format, although in the ensuing description and discussion attention will be drawn only to some aspects of these data. These data demonstrate preferences for extraversion (59%) over introversion (41%), for sensing (77%) over intuition (23%), for feeling (60%), over thinking (40%), and for judging (90%) over perceiving (10%). The two predominant types were ESFJ (25%) and ISFJ (20%)

- insert table 1 about here -

Table 2 presents the scale properties of the two components of the Francis Burnout Inventory in terms of the item retest correlations, together with the item endorsement as the sum of the agree strongly and agree responses. Both scales functioned with a good level of internal consistency reliability as reported by the alpha coefficient (Cronbach, 1951): SEET, $\alpha = .75$; SITS, $\alpha = .84$.

- insert table 2 about here -

Table 3 examines the relationships between the dichotomous type preferences and scores recorded on the SEET and the SITS. These data demonstrate that levels of emotional exhaustion are independent of psychological type preferences on the perceiving process (sensing and intuition), on the judging process (thinking and feeling), and on the attitudes

toward the outer world (judging and perceiving), but significantly related to the orientations (introversion and extraversion). Introverts record significantly higher scores than extraverts on the scale of emotional exhaustion. Levels of satisfaction are independent of psychological type preferences on the orientations (introversion and extraversion) and on the attitudes toward the outside world (judging and perceiving), but significantly related to the perceiving process (sensing and intuition), and to the judging process (thinking and feeling). Higher levels of satisfaction are experienced by intuitive types than by sensing types. Higher levels of satisfaction are experienced by feeling types than thinking types.

- insert table 3 about here -

Discussion and Conclusion

The present study was designed to address two research aims. The first research aim concerned testing the balanced-affect model of work-related psychological health among primary school teachers in Wales. This aim involved adapting measures of positive affect (satisfaction) and negative affect (emotional exhaustion) developed originally for use among clergy to be appropriate for the teaching profession. The second research aim concerned exploring the power of the model of personality proposed by psychological type theory for predicting individual differences in the positive-affect and the negative-affect components of work-related psychological health. These two research aims were operationalised in a study conducted among 260 primary school teachers working in state-maintained Anglican schools in Wales. Five main conclusions emerge from this study.

The first conclusion concerns the psychological properties of the two measures modified from the Francis Burnout Inventory for use among teachers, the Scale of Emotional Exhaustion in Teaching and the Satisfaction in Teaching Scale. Both instruments demonstrated good internal consistency reliability in terms of the Cronbach alpha coefficients (.75 for the Scale of Emotional Exhaustion in Teaching, and .84 for the Satisfaction in

Teaching Scale) and good face validity in terms of the issues covered. These properties are consistent with the range of alpha coefficients recorded by the parent instruments (Scale of Emotional Exhaustion in Ministry and Satisfaction in Ministry Scale) as reported, for example, by Francis, Kaldor, Robbins, and Castle (2005) and by Francis, Village, Robbins, and Wulff (2011).

The second conclusion concerns the account of the work-related psychological health of primary school teachers working in state-maintained Anglican schools in Wales in terms of the percentage endorsement of the individual items. These data demonstrate both a high level of satisfaction with teaching alongside some high indicators of emotional exhaustion associated with teaching. In terms of the data generated by the Satisfaction in Teaching Scale, three of the items were endorsed by at least nine out of every ten teachers: 97% gained a lot of personal satisfaction from working with pupils; 94% gained a lot of personal satisfaction from their role as a teacher; 90% felt that their care for pupils has a positive influence on their lives. In terms of the data generated by the Scale of Emotional Exhaustion in teaching, two items were endorsed by at least half of the teachers: 66% felt drained by their work as a teacher; 53% found themselves frustrated in their attempts to accomplish tasks important to them. These percentage endorsements are not dissimilar from those recorded on similar items by clergy, as reported, for example, by Francis, Wulff, and Robbins (2008) and by Brewster, Francis, and Robbins (2011).

The third conclusion confirms the psychological type profile of teachers as preferring extraversion over introversion, sensing over intuition, feeling over thinking, and judging over perceiving. For example these findings are consistent with the psychological type profile of a sample of 183 female trainee teachers in Wales reported by Francis (2006) who found the following preferences: extraversion (67%) over introversion (33%), sensing (72%) over intuition (28%), feeling (79%) over thinking (21%), and judging (63%) over perceiving

(37%). These findings are also consistent with the general profile of elementary school teachers in the USA, as reported by Schurr, Henrichsen, Moore, and Wittig (1993), Sears, Kennedy, and Kaye (1997), and Reid (1999), and with the general profile of trainee teachers in Wales (Francis, 2006).

The fourth conclusion concerns the connection between work-related emotional exhaustion and psychological type among primary school teachers. These findings demonstrate both that extraverts are more likely than introverts to take up a career as a primary school teacher and that extraverts are less susceptible than introverts to experience high levels of emotional exhaustion from working as teachers. On this account it seems that the profession of teaching in primary schools may have been shaped by extraverts for extraverts and that introverts experience working in this environment as especially stressful. Greater awareness of the connection between their psychological type profile and individual differences in work-related psychological health may help introverts to understand better their experiences of emotional exhaustion and may equip introverts to develop appropriate strategies for reducing their susceptibility for professional burnout. For example, the teaching environment preferred by introverts may place a higher value on quiet conversation and on individual learning activities. The implementation of such an environment may enhance the learning experiences of introvert learners, as well as enhance the work-related psychological health of introvert teachers.

The fifth conclusion concerns the connection between work-related satisfaction and psychological type among primary school teachers. Two key findings emerge from these data. First, although there are considerably fewer intuitive types than sensing types engaged in teaching at primary level, intuitive types gain greater satisfaction than sensing types from this sphere of work. On this account, it seems that, although the profession of teaching in primary schools may have been shaped by sensing types for sensing types, intuitive types

may be able to bring some degree of transformative imagination to the work that brightens that experience. Greater awareness of the connection between their psychological type profile and individual difference in work-related psychological health may help sensing types to understand better their experiences of lower satisfaction with teaching and to draw on their less preferred intuitive function to re-envision creative opportunities within the classroom. Second, there are more feeling types than thinking types engaged in teaching at primary level and feeling types gain greater satisfaction than thinking types from this sphere of work. On this account, it seems that the demands made by teaching in primary schools on the feeling function may disadvantage thinking types. Greater awareness of the connection between their psychological type profile and individual differences in work-related psychological health may help thinking types to understand better their experiences of lower satisfaction with teaching and to develop strategies to resource their less preferred feeling function.

This study has proposed two new instruments for assessing the work-related psychological health of primary school teachers and proposed some insights into the connection between psychological type and work-related psychological health as assessed by these two instruments. Replication studies are now needed to test the stability of these findings among other samples of primary school teachers.

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Table 1

Psychological type distribution for primary school teachers in Wales

The Sixteen Complete Types				Dichotomous Preferences				
ISTJ <i>n</i> = 32 (12.3%) +++++ +++++ ++	ISFJ <i>n</i> = 51 (19.6%) +++++ +++++ +++++	INFJ <i>n</i> = 7 (2.7%) +++	INTJ <i>n</i> = 8 (3.1%) +++	E <i>n</i> = 154 (59.2%)	I <i>n</i> = 106 (40.8%)			
ISTP <i>n</i> = 1 (0.4%)	ISFP <i>n</i> = 1 (0.4%)	INFP <i>n</i> = 4 (1.5%) ++	INTP <i>n</i> = 2 (0.8%) +	S <i>n</i> = 201 (77.3%)	N <i>n</i> = 59 (22.7%)			
ESTP <i>n</i> = 4 (1.5%) ++	ESFP <i>n</i> = 6 (2.3%) ++	ENFP <i>n</i> = 5 (1.9%) ++	ENTP <i>n</i> = 2 (0.8%) +	T <i>n</i> = 103 (39.6%)	F <i>n</i> = 157 (60.4%)			
ESTJ <i>n</i> = 40 (15.4%) +++++ +++++ +++++	ESFJ <i>n</i> = 66 (25.4%) +++++ +++++ +++++ +++++	ENFJ <i>n</i> = 17 (6.5%) +++++ ++	ENTJ <i>n</i> = 14 (5.4%) +++++	J <i>n</i> = 235 (90.4%)	P <i>n</i> = 25 (9.6%)			
				Pairs and Temperaments				
				IJ <i>n</i> = 98 (37.7%)	IP <i>n</i> = 8 (3.1%)			
				EP <i>n</i> = 17 (6.5%)	EJ <i>n</i> = 137 (52.7%)			
				ST <i>n</i> = 77 (29.6%)	SF <i>n</i> = 124 (47.7%)			
				NF <i>n</i> = 33 (12.7%)	NT <i>n</i> = 26 (10.0%)			
				SJ <i>n</i> = 189 (72.7%)	SP <i>n</i> = 12 (4.6%)			
				NP <i>n</i> = 13 (5.0%)	NJ <i>n</i> = 46 (17.7%)			
				TJ <i>n</i> = 94 (36.2%)	TP <i>n</i> = 9 (3.5%)			
				FP <i>n</i> = 16 (6.2%)	FJ <i>n</i> = 141 (54.2%)			
				IN <i>n</i> = 21 (8.1%)	EN <i>n</i> = 38 (14.6%)			
				IS <i>n</i> = 85 (32.7%)	ES <i>n</i> = 116 (44.6%)			
				ET <i>n</i> = 60 (23.1%)	EF <i>n</i> = 94 (36.2%)			
				IF <i>n</i> = 63 (24.2%)	IT <i>n</i> = 43 (16.5%)			
Jungian Types (E)			Jungian Types (I)			Dominant Types		
	<i>n</i>	%		<i>n</i>	%		<i>n</i>	%
E-TJ	54	20.8	I-TP	3	1.2	Dt.T	57	21.9
E-FJ	83	31.9	I-FP	5	1.9	Dt.F	88	33.8
ES-P	10	3.8	IS-J	83	31.9	Dt.S	93	35.8
EN-P	7	2.7	IN-J	15	5.8	Dt.N	22	8.5

Note: N = 260

Table 2

Francis Burnout Inventory: scale properties

	r	%
<i>Scale of Emotional Exhaustion in Teaching</i>		
I feel drained by my work as a teacher	.50	66
Fatigue and irritation are part of my daily experience	.58	45
I am invaded with sadness I can't explain	.52	5
I am feeling negative or cynical about the people with whom I work	.35	5
I always have enthusiasm for my work*	.17	53
My humour has a cynical and biting tone	.36	18
I find myself wanting to spend less and less time with pupils	.31	6
I have been discouraged by the lack of personal support for me here	.35	6
I find myself frustrated in my attempts to accomplish tasks important to me	.38	53
I am less patient with pupils than I used to be	.49	15
I am becoming less flexible in my dealings with pupils	.43	10
<i>Satisfaction in Teaching Scale</i>		
I have accomplished many worthwhile things in my teaching	.56	89
I gain a lot of personal satisfaction from working with pupils	.56	97
I deal very effectively with the problems pupils present	.49	79
I can easily understand how my pupils feel about things	.37	80
I feel very positive about my teaching	.54	81
I feel that my care for pupils has a positive influence on their lives	.55	90
My teaching ministry has a positive influence on the life and prospects of my pupils	.54	88
I feel that my teaching is really appreciated by people	.41	59
I am really glad that I entered teaching	.59	88
Teaching gives a real purpose and meaning to my life	.56	88
I gain a lot of personal satisfaction from my role as a teacher	.56	94

* Note. This item has been reverse coded to compute the correlations, but not the percentage endorsement.

N = 260

Table 3

Mean scores of emotional exhaustion and satisfaction in teaching by dichotomous type preferences

Comparisons	Mean	SD	N	<i>t</i>	<i>p</i> <
<i>Scale of Emotional Exhaustion in Teaching</i>					
extraversion	26.3	5.8	154		
introversion	28.3	6.1	106	2.6	.01
sensing	27.4	6.0	201		
intuition	26.1	6.1	59	1.5	NS
thinking	27.6	6.2	103		
feeling	26.8	5.9	157	1.3	NS
judging	27.1	5.8	235		
perceiving	27.2	7.8	25	0.0	NS
<i>Satisfaction in Teaching Scale</i>					
extraversion	46.0	4.0	154		
introversion	45.0	5.3	106	1.6	NS
sensing	45.1	4.6	201		
intuition	47.4	4.1	59	3.4	.001
thinking	44.9	5.0	103		
feeling	46.1	4.3	157	2.2	.05
judging	45.6	4.7	235		
perceiving	45.9	3.9	25	0.3	NS

Note: N = 260