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Psychological types of female primary school teachers in Anglican state-maintained schools
in England and Wales: implications for continuing professional development

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Abstract

A sample of 221 female primary school teachers in Anglican state-maintained schools in England and Wales completed the Francis Psychological Type Scales (FPTS). The data demonstrated clear preferences for Extraversion (E) over Introversion (I), for Sensing (S) over Intuition (N), for Feeling (F) over Thinking (T) and for Judging (J) over Perceiving (P). The two predominant types among female primary school teachers were ESFJ (27.6%) and ISFJ (18.6%). These findings confirm earlier research among trainee female primary school teachers and help to clarify the main strengths and potential challenges facing primary schools in light of knowledge about the key psychological preferences of those who shape the classroom environment. These findings also generate new insights into teacher retention and career paths in primary schools.

Keywords: psychological type, teachers, England and Wales, continuing professional development, empirical study

Introduction

Psychological type theory is helpful in generating a range of insights concerning the interaction between individual differences in personality profile and the shaping of professional practice. Psychological type theory has its roots in the pioneering work of Carl Jung (1971) and in the development and operationalisation of Jung's theory through instruments like the Myers Briggs Type Indicator (Myers & McCaulley, 1985) and the Keirsey Temperament Sorter (Keirsey & Bates, 1978) and the Francis Psychological Type Scales (Francis, 2005). Although psychological type theory and the instruments designed to operationalise that theory have been subject to rigorous critique and criticism (see, for example, McCrae & Costa, 1989), a number of recent studies have supported the coherence, reliability and validity of the measures (see, for example, Francis & Jones, 1999; Capraro & Capraro, 2002). Good reviews of the debate have been provided by Bayne (1995, 2005). Psychological type theory distinguishes between four sets of preferences: preference of orientation (introversion *or* extraversion), preference of perceiving (sensing *or* intuition), preference of judging (thinking *or* feeling) and preference of attitude toward the outer world (judging *or* perceiving). It is this definition of preference which shapes the distinctive characteristic of psychological type theory as a typology rather than as a factorial system of personality measurement. According to this typology each individual is assigned to one category within each of the four dichotomous preferences, leading to the definition of 16 discrete personality types.

The two orientations are concerned with where energy is drawn from and focused. On the one hand, extraverts (E) are orientated toward the outer world; they are energised by the events and people around them. They enjoy communicating and thrive in stimulating and exciting environments. They tend to focus their attention upon what is happening outside them. They are usually open people, easy to get to know, and enjoy having many friends. On

the other hand, introverts (I) are orientated toward their inner world; they are energised by their inner ideas and concepts. They enjoy solitude, silence, and contemplation, as they tend to focus their attention upon what is happening in their inner life. They may prefer to have a small circle of intimate friends rather than many acquaintances.

The two perceiving functions are concerned with the way in which people perceive information. On the one hand, sensing types (S) focus on the realities of a situation as perceived by the senses. They tend to focus on specific details, rather than the overall picture. They are concerned with the actual, the real, and the practical and tend to be down to earth and matter of fact. On the other hand, intuitive types (N) focus on the possibilities of a situation, perceiving meanings and relationships. They may feel that perception by the senses is not as valuable as information gained from the unconscious mind as indirect associations and concepts impact on their perception. They focus on the overall picture, rather than on specific facts and data.

The two judging functions are concerned with the criteria which people employ to make decisions and judgements. On the one hand, thinking types (T) make decisions and judgements based on objective, impersonal logic. They value integrity and justice. They are known for their truthfulness and for their desire for fairness. They consider conforming to principles to be of more importance than cultivating harmony. On the other hand, feeling types (F) make decisions and judgements based on subjective, personal values. They value compassion and mercy. They are known for their tactfulness and for their desire for peace. They are more concerned to promote harmony, than to adhere to abstract principles.

The two attitudes toward the outer world are determined by which of the two sets of functions (that is, perceiving S/N, or judging T/F) is preferred in dealings with the outer world. On the one hand, judging types (J) seek to order, rationalise, and structure their outer world, as they actively judge external stimuli. They enjoy routine and established patterns. They prefer to

follow schedules in order to reach an established goal and may make use of lists, timetables, or diaries. They tend to be punctual, organised, and tidy. They prefer to make decisions quickly and to stick to their conclusions once made. On the other hand, perceiving types (P) do not seek to impose order on the outer world, but are more reflective, perceptive, and open, as they passively perceive external stimuli. They have a flexible, open-ended approach to life. They enjoy change and spontaneity. They prefer to leave projects open in order to adapt and improve them. Their behaviour may often seem impulsive and unplanned.

A considerable body of evidence has accrued over the years on the relationship between personality type and self-selected career choices. A number of studies point to the predominance of ISTJ and ESTJ among accountants (Descouzis, 1989; Jacoby, 1981; Satava, 1996), ISFJ and ESFJ among nurses and nursing assistants (Daub, Friedman, Cresci, & Keyser, 2000; Jain & Lall, 1996), ESTJ and ISTJ among managers (Cabral & Joyce, 1991; Ginn, 1994; Hawkins, Williams, & Hawkins, 1990; Oswick & Mahoney, 1993), and ISFJ and ESFJ among Catholic and Evangelical religious professionals (Bigelow, Fitzgerald, Busk, Girault, & Avis, 1988; Francis, Payne, & Jones, 2001; Francis, Penson, & Jones, 2001). A useful collection of research samples was provided by Macdaid, McCaulley, and Kainz (1986).

Three kinds of practical implications emerge from taking seriously the type profiles associated with different professional groups. First, it is possible to appreciate the strengths brought to distinctive areas of work by certain type preferences. For example, a preference for ISTJ among accountants indicates a dominant concern with detail and facts. A preference for ESTJ among managers indicates a dominant concern for objective decision-making and deployment of human resource. A preference for ESFJ among clergy indicates a dominant concern with people and with interpersonal relationships. Second, it is possible to appreciate how the dominant characteristics of the professionals themselves shape the public perception

of the profession. The ISTJ world of the accountants may shape a predominantly introverted world in which individuals prefer to work alone and place little reliance on the overt support of others. The ESTJ world of the manager may shape a predominantly tough environment in which the overall good of the organisation takes precedence over the feelings of the employees. The ESFJ world of the clergy may shape a predominantly person-centred environment in which tough decisions are shelved and organisational matters are subordinated to interpersonal concerns. Third, it is possible to appreciate how individuals who do not conform to the preferred personality profile of a given profession may face difficulty in being properly recognised and affirmed within their chosen profession. The ENFP accountant, as mirror image of the ISTJ, may be viewed as troublesome for wishing to explore new ways of tackling problems routinely handled by established procedures. The INFP manager, as mirror image of the ESTJ, may be viewed as soft and indecisive in wishing to manage change with innovation and human-concern. The INTP minister of religion, as mirror image of ESFJ, may be viewed as harsh and unsympathetic in dealing with pastoral issues from a flexible and strategic perspective.

Operating within this theoretical framework, Francis (2006) reported on the psychological type profile of a sample of 183 female trainee school teachers in Wales, using Form G (Anglicised) of the MBTI. These data demonstrated clear preferences for extraversion (67%) over introversion (33%), for sensing (72%) over intuition (28%), for feeling (79%) over thinking (21%), and for judging (63%) over perceiving (37%). The two predominant types among these female trainee primary school teachers were ESFJ (25%) and ISFJ (15%). The predominance of preference for SFJ (40%) among female trainee primary school teachers in Wales is consistent with data generated in the United States of America on elementary school teachers (see Reid, 1999; Schurr, Henriksen, Moore, & Wittig, 1993; Sears, Kennedy, & Kaye, 1997). For example, in her study of 189 female elementary school teachers, Reid

(1999) found that 43% of the participants were SFJ, although in this study ISFJ (30%) outnumbered ESFJ (13%). Other overviews of the psychological type profile of teachers in the United States of America, not specific to the elementary level, have also identified the predominant types as ESFJ (Lawrence, 1979) or ISFJ (Macdaid, McCaulley, & Kainz, 1986), although variations from this basic pattern have been found among groups of teachers engaged in special needs education (Meisgeier & Richardson, 1996) or among groups of innovative or 'outstanding' teachers (Rushton, Morgan, & Richard, 2007).

Reflecting on the implications of these type preferences for the environment of the primary school classroom, Francis (2006) draws attention to the binary distinctions as providing four points of contrast. First, the majority (67%) of the trainee primary teachers preferred extraversion, compared with 33% who preferred introversion. This preference may lead to the normative primary classroom favouring an extravert culture. In this extravert culture, a variety of activities will be encouraged. For example, children will be encouraged to talk about what they are doing, thinking, and feeling. A level of background noise and social interaction will be assumed as good practice. Children will not be expected to work in silence. In such an environment, progressive educational methods could flourish but are unlikely to do so given other preferred characteristics of this cohort of trainee teachers. Governmental policy to stimulate traditional educational methods need not be threatened by recruiting extraverts into the classroom. Introverted pupils who long for the space to be, for the peace to think, and for an escape from social interaction would be the potential losers.

Second, the majority (72%) of the trainee primary teachers preferred sensing, compared with 28% who preferred intuition. This preference may lead to the normative primary classroom favouring a sensing culture. In this sensing culture, a love for the conventional will be fostered. A lot of attention will be given to the environment, which will tend to be neat and tidy. Lessons will be planned in advance and the criteria of the National Curriculum clearly

met. Governmental policy to stimulate traditional education methods will be positively promoted by recruiting sensors into the classroom. Intuitive pupils who fail to be contained within the carefully constructed sensing environment and whose individuality frustrates the teacher's quest for conformity are the potential losers.

Third, the majority (78%) of the trainee primary teachers preferred feeling, compared with 22% who preferred thinking. This preference may lead to the normative primary classroom favouring a feeling culture. In this feeling culture, the individuality and individual needs of each child count, at least as far as the teacher perceives these needs. The teacher will take time to relate to each child as an individual human being and to show an interest in the opportunities and constraints afforded by the child's home background. Time will be taken to settle individual children to the tasks in hand. It is from this feeling culture that governmental policy stands to experience its greatest threat. The teacher who prefers feeling may regard the regimented constraints of the National Curriculum and the regular demands of performance indicators as unwelcome intrusions of scientific objectivity (so favoured by Ts) that interrupt the true educational process envisaged by Fs. Pupils who prefer thinking, whose incisive logic and pursuit of truth and justice may be rejected as insensitive or inappropriate by the feeling teacher, are the potential losers.

Fourth, the majority (63%) of the trainee primary teachers preferred judging, compared with 37% who preferred perceiving. This preference may lead to the normative primary classroom favouring a judging culture. In this judging culture, the school day is carefully planned and well organised from the beginning to the end. The week will be divided into a recognised and recurring pattern. Every Monday follows the same routine. The days will be divided into clear lesson slots. Everyone will know when maths will be over and when physical education will begin. Books will be clearly classified and well organised on the class library shelves, and the children's desks or tables will remain in fixed locations. The Government's

guidelines for a structured curriculum and clearly specified learning outcomes provide just the kind of framework that will appeal to the teacher who prefers judging. The potential losers will be the perceiving pupils who become so absorbed in the interest of the moment that they habitually arrive late for class or who fail to notice that the transition has taken place from silent reading to classroom maths.

The predominant SFJ profile identified among Francis' sample of trainee female primary school teachers may also have two key implications for teacher retention. First, the highly structured world of the SJ preference may prove to be particularly uncomfortable to individuals who enter the teaching profession with a clear preference for perceiving. In Francis' sample of trainee female primary school teachers, 37% of the trainees expressed a preference for perceiving. It is hypothesised that in a sample of practising teachers the proportion of individuals with a preference for perceiving will decrease due to premature exiting from the teaching profession of teachers with a preference for perceiving who feel misunderstood and misplaced in the profession.

Second, the highly person-centred world of the SF preference may find the current demands placed on managers within the school system particularly unattractive. The SF female primary school teacher may well prefer to give higher priority to personal, family and home life than to progression through the career structure to deputy headteacher and to headteacher. Such a career trajectory into management is likely to appeal much more to teachers with a preference for thinking. In Francis' sample of trainee female primary school teachers, just 21% expressed a preference for thinking. It is hypothesised that in a sample of practising teachers the proportion of individuals with a preference for thinking will increase due to premature exiting from the teaching profession of teachers with a preference for feeling who feel unrewarded and unsustained by the career prospects of the profession.

The aim of the present project, therefore, was to extend and develop the study by Francis

(2006) among female trainee primary school teachers by examining the psychological type profile of practising primary school teachers. Since Francis' original study was conducted in an Anglican church-related institution concerned with teacher education and training, the present study is based on teachers working in Anglican church-related primary schools. The present study was designed to test three hypotheses informed by the foregoing discussion: that the predominant type preferences of female primary school teachers will be ESFJ followed by ISFJ; that there will be a significantly lower proportion of individuals preferring perceiving among practising female teachers than among trainee female teachers; and that there will be a significantly higher proportion of individuals preferring thinking among practising female teachers than among trainee female teachers.

Method

As part of a routine in-service development programme offered to Anglican primary schools by one of the authors, participating teachers were invited to complete the Francis Psychological Type Scale (FPTS: Francis, 2005). This is a forced-choice 40-item inventory designed to distinguish between preferences for Introversion or Extraversion, for Sensing or Intuition, for Feeling or Thinking, and for Judging or Perceiving. Over 90% of the participants accepted the invitation to participate in the project, providing responses from 221 females and 35 males. In light of the difficulty of making generalisations based on only 35 cases, the following analysis concentrated on the female teachers.

Of the total sample of female primary school teachers, 23% were in their twenties, 20% in their thirties, 27% in their forties, 29% in their fifties, and 1% in their sixties; 25% were in senior management positions, 14% in middle management positions, 47% were in main grade positions and 14% were recently qualified. The majority had entered the teaching profession as their first career (77%), with the remaining 23% transferring from some other form of employment. Just over a third (35%) attended church most weeks, 28% attended at least

once a month, 33% attended at least once a year, and 4% never attended church.

Results

The type distribution of the 221 primary school teachers is presented in table 1. 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 this recognised format, although in the ensuing description and discussion attention will be drawn only to some aspects of these data. These data demonstrate

- insert table 1 about here -

clear preferences for Extraversion over Introversion (61% - 39%), for Sensing over Intuition (76% - 24%), for Feeling over Thinking (67% - 33%), and for Judging over Perceiving (89% - 11%). The two predominant types were ESFJ (28%) and ISFJ (19%).

Table 1 also compares the type distribution of the present sample of 221 female practising primary school teachers with the type distribution of the earlier sample of 183 female trainee primary school teachers reported by Francis (2006). The two key findings from these data are as follows. First, there are no significant differences between the two samples in the preferences between Extraversion and Introversion, and in the preference between Sensing and Intuition. Second, there are significant differences between the two samples in the preference between Feeling and Thinking and in the preference between Judging and Perceiving. There are lower proportions of perceivers and higher proportions of thinkers among female practising teachers than among female trainee teachers.

Discussion and conclusion

All three of the hypotheses proposed by the present study were confirmed by the data. The implications of these main findings deserve discussion in turn.

The first hypothesis was that the predominant type preferences of practising female primary

school teachers would follow the same pattern as that identified by Francis (2006) among trainee female primary school teachers. This hypothesis was confirmed with 43% of the trainees and 46% of the practising teachers displaying preference for SFJ. The most frequently reported type was ESFJ (25% among trainees and 28% among practising teachers), followed by ISFJ (15% among trainees and 19% among practising teachers). For the ESFJ, the dominant and most easily recognisable characteristic is extraverted feeling with introverted sensing. Myers (1987, p. 7) ascribed the following characteristics to the ESFJ:

Warm-hearted, talkative, popular, conscientious, born co-operators, active committee members. Need harmony and may be good at creating it. Always doing something nice for someone. Work best with encouragement and praise. Main interest is in things that directly and visibly affect people's lives.

Those concerned with the management of schools and with the continuing professional development of the whole teaching staff need to be aware of the appropriate strengths brought to the primary school by ESFJ teachers, and to affirm these strengths. They need also to be aware that, in a culture shaped and dominated by ESFJ preferences, the INFP teacher may experience particular difficulty. The INFP is likely to be attracted to the teaching profession because of the desire to exercise the feeling function in this caring way. The INFP teacher, however, is likely to experience difficulty in having her preference for introversion valued in a predominantly extravert culture. Pupils conditioned to respond to extravert teachers may find the INFP's quieter approach to be strange and unfamiliar. The INFP teacher is likely to find her preference for intuition largely rejected in a predominantly sensing culture. Fellow teachers conditioned to expect sensing-type contributions to staff meetings may find the INFP's unpredictable and unquenchable thirst for proposing new, untried, and unproven strategies disconcerting and threatening. The INFP teacher is likely to find her preference for perceiving largely to be misunderstood in a predominantly judging

culture. Pupils conditioned to expect a highly structured environment may find the INFP teacher's commitment to openness and flexibility disorienting. Fellow teachers conditioned to find judging-type conditions in the classroom may misunderstand and misrepresent the INFP teacher's commitment to a perceiving-type environment as indicative of incompetence, mismanagement, and irresponsibility.

Type awareness workshops as an integral part of the continuing professional development of teachers should be able to promote better informed appreciation of the diverse and complementary skills which teachers of different psychological type preferences can bring to the primary school environment.

The second hypothesis was that there will be a significantly lower proportion of individuals preferring perceiving among practising female teachers than among trainee female teachers.

This hypothesis was confirmed, with 11% of practising female teachers reporting a preference for perceiving, compared with 37% of trainee female teachers. This finding is consistent with the view that a number of the individuals with a preference for perceiving recruited into the teaching profession are not retained in that profession. In the highly structured environment of the primary school shaped by the SJ preference, teachers with a clear preference for perceiving are likely to feel misplaced and misunderstood. This perception is then likely to be reflected in premature exiting from the profession.

Those concerned with the management of schools and with the continuing professional development of the whole teaching staff may need to be particularly aware of the benefits brought to the teaching profession by perceivers and ensure that they are given proper opportunities to feel valued within the system. Perceivers are noted for their flexibility and for their creativity. They are content in proposing and trying new ideas and novel approaches to conventional problems. They can often help others see new solutions to old problems and

to convert challenges into opportunities. They are willing and able to respond to the unforeseen needs of the moment, often without preparation and without undue stress.

The third hypothesis was that there will be a significantly higher proportion of individuals preferring thinking among practising female teachers than among trainee female teachers.

This hypothesis was confirmed, with 33% of practising female teachers reporting a preference for thinking, compared with 21% of trainee female teachers. This finding is consistent with the view, while the teaching profession recruits many feelers, the professional structure of the primary school is more likely to attract and to reward thinkers. Being less likely than thinkers to welcome the transition from classroom practice to the management office of the headteacher, female primary school teachers with a preference for feeling are more likely to seek personal fulfilment away from the school setting.

Those concerned with the management of schools and with the continuing professional development of the whole teaching staff may need to be particularly aware of the tendency for some feelers to feel unaffirmed by a career structure which appears to see promotion in terms of valuing the thinking perspective more than the feeling perspective. The need here may be for a radical reconceptualisation of the relationship between classroom practice and management structure in the primary school. Neither the professional skills nor the personal psychological preferences affirmed in the one context are necessarily transferable to the other context.

These two studies, the present study among 221 female practising primary school teachers and Francis' (2006) study among 183 female trainee primary school teachers, have broken new ground in educational research in the United Kingdom by employing psychological type theory to illuminate current practice in primary schools and to suggest strategies relevant for the recruitment and retention of teaching staff. The findings and conclusions have demonstrated the rich potential within this field of theory for developing and supporting the

teaching profession. Further research is now needed to build on these two studies and to establish the generalisability of the findings among larger samples, including men as well as women, including trainees and practitioners in state-maintained institutions as well as church-related institutions, and including secondary schools as well as primary schools.

References

- Bayne, R. (1995), *The Myers-Briggs Type Indicator: A critical review and practical guide*, London: Chapman and Hall.
- _____(2005), *Ideas and evidence: Critical reflections on MBTI theory and practice*, Gainesville, FL: Centre for Application of Psychological Type.
- Bigelow, E. D., Fitzgerald, R., Busk, P., Girault, E., and Avis, J. (1988), 'Psychological characteristics of Catholic sisters: Relationships between the MBTI and other measures', *Journal of Psychological Type*, 14, 32-36.
- Cabral, G., and Joyce, M. H. (1991), 'Managers and psychological type in an industrial setting: Sex differences and similarities, managerial level and age.', *Journal of Psychological Type*, 21, 40-53.
- Capraro, R. M., and Capraro, M. M. (2002). 'Myers-Briggs Type Indicator score reliability across studies: A meta-analytic reliability generalisation study', *Educational and Psychological Measurement*, 62, 590-602.
- Daub, C., Friedman, S. M., Cresci, K., and Keyser, R. (2000), 'Frequencies of MBTI types among nursing assistants providing care to nursing home eligible individuals', *Journal of Psychological Type*, 54, 12-16.
- Descouzis, D. P. (1989), 'Psychological types of tax preparers', *Journal of Psychological Type*, 17, 36-38.
- Francis, L. J. (2005), *Faith and psychology: Personality, religion and the individual*, London: Darton, Longman and Todd.
- _____(2006), 'Psychological types of female trainee primary school teachers in Wales: Teachers in a changing educational climate', *Journal of Psychological Type*, 66, 7-13.
- Francis, L. J., and Jones, S. H. (1999), 'The scale properties of the MBTI Form G (Anglicised) among adult churchgoers', *Pastoral Sciences*, 18, 107-126.

- Francis, L. J., Penson, A. W., and Jones, S. H. (2001), 'Psychological types of male and female Bible College students in England', *Mental Health, Religion and Culture*, 4, 23-32.
- Francis, L. J., Payne, V. J. and Jones, S. H. (2001), 'Psychological types of male Anglican clergy in Wales', *Journal of Psychological Type*, 56, 19-23.
- Ginn, C. W. (1994), 'Psychological profiles of commercial airport directors', *Journal of Psychological Type*, 28, 11-20.
- Hawkins, C. A., Williams, M. S., and Hawkins, R. C. (1990), 'Psychological types of social service managers', *Journal of Psychological Type*, 19, 44-49.
- Jacoby, P. F. (1981), 'Psychological types and career success in the accounting profession', *Research in Psychological Type*, 4, 24-37.
- Jain, V. K., and Lall, R. (1996), 'Nurses' personality types based on the Myers-Briggs Type Indicator', *Psychological Reports*, 78, 938.
- Jung, C. G. (1971), *Psychological types: The collected works, volume 6*, London: Routledge and Kegan Paul.
- Keirsey, D., and Bates, M. (1978), *Please understand me*, Del Mar, CA: Prometheus Nemesis.
- Lawrence, G. (1979), *People types and tiger stripes: A practical guide to learning styles*, Gainesville, FL: Centre for Application of Psychological Type.
- McCrae, R. R., and Costa, P. T. (1989), 'Reinterpreting the Myers-Briggs Type Indicator from the perspective of the Five-Factor Model of Personality', *Journal of Personality*, 57, 17-40.
- Macdaid, G. P., McCaulley, M. H., and Kainz, R. I. (1986), *Myers-Briggs Type Indicator: Atlas of type tables*, Gainesville, FL: Centre for Application of Psychological Type Inc.

- Meisgeiner, C. H., and Richardson, R. C. (1996), 'Personality types of interns in alternative teacher certification programmes', *Education Forum*, 60, 350-360.
- Myers, I. B. (1987), *Introduction to type*, Oxford: Oxford Psychologists Press.
- Myers, I. B., and McCaulley, M. H. (1985), *Manual: A guide to the development and use of the Myers-Briggs Type Indicator*, Palo Alto, CA: Consulting Psychologists Press.
- Oswick, C., and Mahoney, J. P. (1993), 'Psychological types of first-line supervisors in the United Kingdom: A comparison to US and UK managers', *Journal of Psychological Type*, 25, 31-38.
- Reid, J. (1999), 'The relationship among personality type, coping strategies, and burnout in elementary teachers', *Journal of Psychological Type*, 51, 22-33.
- Rushton, S., Morgan J., and Richard, M. (2007), 'Teacher's Myers-Briggs personality profiles: Identifying effective teacher personality traits', *Teaching and Teacher Education*, 23, 432-441.
- Satava, D. (1996), 'Personality types of CPAs, national vs. local firms', *Journal of Psychological Type*, 36, 36-41.
- Schurr, K. T., Henriksen, L. W., Moore, D. E., and Wittig, A. F. (1993), 'A comparison of teacher effectiveness and NTE Core Battery scores for SJ and a combined group of NJ, NP and SP first-year teachers', *Journal of Psychological Type*, 25, 25-30.
- Sears, S. J., Kennedy, J. J., and Kaye, G. L. (1997), 'Myers-Briggs personality profiles of prospective educators', *Journal of Educational Research*, 90, 195-202.

Table 1.

Type Distribution for female primary school teachers in Anglican state-maintained schools in England and Wales

N = 221, + = 1% of *N*, *I* = Selection Ratio Index, **p* < .05 ***p* < .01 ****p* < .001

The Sixteen Complete Types				Dichotomous Preferences			
ISTJ <i>n</i> = 23 (10.4%) <i>I</i> = 2.38* +++++ +++++	ISFJ <i>n</i> = 41 (18.6%) <i>I</i> = 1.21 +++++ +++++ +++++	INFJ <i>n</i> = 8 (3.6%) <i>I</i> = 1.32 ++++	INTJ <i>n</i> = 7 (3.2%) <i>I</i> = 5.80 +++	E	135	(61.1%)	<i>I</i> = 0.92
				I	86	(38.9%)	<i>I</i> = 1.17
				S	168	(76.0%)	<i>I</i> = 1.05
				N	53	(24.0%)	<i>I</i> = 0.86
				T	73	(33.0%)	** <i>I</i> = 1.55
				F	148	(67.0%)	** <i>I</i> = 0.85
				J	197	(89.1%)	*** <i>I</i> = 1.42
				P	24	(10.9%)	*** <i>I</i> = 0.29
ISTP <i>n</i> = 0 (0.0%) <i>I</i> = 0.00 +	ISFP <i>n</i> = 3 (1.4%) <i>I</i> = 0.25* +	INFP <i>n</i> = 2 (0.9%) <i>I</i> = 0.28	INTP <i>n</i> = 2 (0.9%) <i>I</i> = 1.66	Pairs and Temperaments			
				IJ	79	(35.7%)	** <i>I</i> = 1.56
				IP	7	(3.2%)	** <i>I</i> = 0.31
				EP	17	(7.7%)	*** <i>I</i> = 0.29
				EJ	118	(53.4%)	** <i>I</i> = 1.34
				ST	56	(25.3%)	* <i>I</i> = 1.50
				SF	112	(50.7%)	<i>I</i> = 0.92
				NF	36	(16.3%)	<i>I</i> = 0.69
				NT	17	(7.7%)	<i>I</i> = 1.76
ESTP <i>n</i> = 3 (1.4%) <i>I</i> = 0.41 +	ESFP <i>n</i> = 7 (3.2%) <i>I</i> = 0.34** +++	ENFP <i>n</i> = 6 (2.7%) <i>I</i> = 0.24*** +++	ENTP <i>n</i> = 1 (0.5%) <i>I</i> = 0.17	SJ	155	(70.1%)	*** <i>I</i> = 1.32
				SP	13	(5.9%)	*** <i>I</i> = 0.31
				NP	11	(5.0%)	*** <i>I</i> = 0.28
				NJ	42	(19.0%)	** <i>I</i> = 1.93
				TJ	67	(30.3%)	*** <i>I</i> = 2.22
				TP	6	(2.7%)	* <i>I</i> = 0.35
				FP	18	(8.1%)	*** <i>I</i> = 0.28
				FJ	130	(58.8%)	<i>I</i> = 1.20
ESTJ <i>n</i> = 30 (13.6%) <i>I</i> = 1.66 +++++ +++++ ++++	ESFJ <i>n</i> = 61 (27.6%) <i>I</i> = 1.10 +++++ +++++ +++++ +++++	ENFJ <i>n</i> = 20 (9.0%) <i>I</i> = 1.51 +++++	ENTJ <i>n</i> = 7 (3.2%) <i>I</i> = 5.80 +++	IN	19	(8.6%)	<i>I</i> = 1.21
				EN	34	(15.4%)	<i>I</i> = 0.74
				IS	67	(30.3%)	<i>I</i> = 1.16
				ES	101	(45.7%)	<i>I</i> = 1.00
				ET	41	(18.6%)	<i>I</i> = 1.26
				EF	94	(42.5%)	<i>I</i> = 0.82
				IF	54	(24.4%)	<i>I</i> = 0.91
				IT	32	(14.5%)	* <i>I</i> = 2.21

Jungian Types (E)			Jungian Types (I)			Dominant Types			<i>Francis, Lankshear and Robbins Psychological types of female primary school teachers</i>		
<i>n</i>	%	<i>I</i>	<i>n</i>	%	<i>I</i>	<i>n</i>	%	<i>I</i>			
E-TJ	37	16.7	*1.91	I-TP	2	0.9	0.55	Dt. T	39	17.6%	*1.70
E-FJ	81	36.7	**1.18	I-FP	5	2.3	**0.26	Dt. F	86	38.9%	0.98
ES-P	10	4.5	0.36	IS-J	64	29.0	*1.47	Dt. S	74	33.5%	1.04
EN-P	7	3.2	***0.22	IN-J	15	6.8	2.07	Dt. N	22	10.0%	*0.57