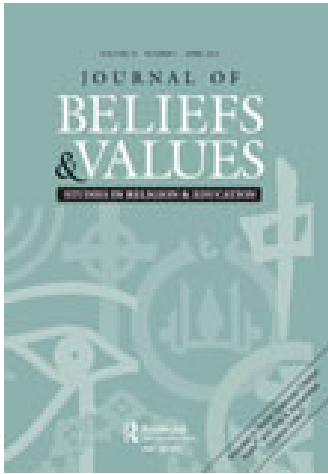


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Journal of Beliefs & Values: Studies in Religion & Education

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/cjbv20>

Do Birds of a Feather Flock Together? An Examination of Calling, Congruence, Job Design and Personality as Predictors of Job Satisfaction and Tenure

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Published online: 28 May 2014.

To cite this article: C. Nilsen, J.K. Earl, F. Elizondo & P.L. Wadlington (2014) Do Birds of a Feather Flock Together? An Examination of Calling, Congruence, Job Design and Personality as Predictors of Job Satisfaction and Tenure, *Journal of Beliefs & Values: Studies in Religion & Education*, 35:1, 10-24, DOI: [10.1080/13617672.2014.884845](https://doi.org/10.1080/13617672.2014.884845)

To link to this article: <http://dx.doi.org/10.1080/13617672.2014.884845>

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Do Birds of a Feather Flock Together? An Examination of Calling, Congruence, Job Design and Personality as Predictors of Job Satisfaction and Tenure

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This study explored whether congruence, calling, job characteristics or personality were better predictors of job satisfaction and tenure. The sample consisted of 1968 employees across four different job roles: sales engineers ($N=309$), graphic designers ($N=383$), teachers ($N=481$) and clergy ($N=795$). Data was collected as part of a selection and development centre battery. Results found evidence of calling, with clergy reporting significantly higher levels of work satisfaction and tenure, despite the absence of some personality predictors (i.e. conscientiousness) and job characteristics (task identity, feedback). In general personality [particularly conscientiousness (+) and neuroticism (-)] along with job characteristics (variety and autonomy) were the most likely predictors of satisfaction across the different roles. No evidence could be found that congruence predicted work satisfaction or tenure. Results have implications for renewed interest in the role of calling according to its original definition and question the role of congruence in determining best fit especially in the context of vocational assessments.

Keywords: calling; congruence; person–Environment fit; job satisfaction; tenure; personality

Introduction

Although we consider the field of vocational psychology to be relatively new compared to other realms of psychology, the notion that some people are better suited to some roles than others has existed since the beginning of time. Plato in 370 BCE was the first to acknowledge that diversities amongst people could be matched with occupations and that it was impossible for man to ‘practice many arts with success’ (Dumont and Carson 1995, 375). Similarly Taoists in Ancient China (6 BCE) outlined the benefits of living life ‘according to one’s true nature’ (Dumont and Carson 1995, 376) and in Basra (955 CE) the *Treatises of the Brethren of Purity* advocated the assignment of people to roles for which they were best suited (Carson and Altai 1994). There is early evidence of job descriptions and competency matrices with workers classified into seven different occupational groups: artisans and craftsman; business and traders; construction engineers and workers; kings, rulers, sultans, politicians and soldiers; employees, servants and daily workers; the disabled, the unemployed and the idle; men of religion and scholars (Carson and Altai 1994). There are two important premises underlying these earliest vocational perspectives congruence and calling. Whilst vocational and organisational psychology has

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progressed considerably since these early days, the notion of people performing better in some jobs than others persists. Over time the significance of congruence and calling have been overshadowed by the need for jobs to be designed with certain characteristics that optimise fit for all. Earlier notions of calling, which were primarily religious based, have given rise to strengths-based approaches, where everyone is assumed to have a calling of some sort evidenced by ‘flow’ (Csikszentmihalyi 2002; Seligman 2002).

Person–environment (P–E) fit is a broad term encompassing the idea that there can be a match, or mismatch, between an individual and their environment. Empirical studies into P–E fit suggest that higher degrees of fit produce higher levels of organisational attraction and greater organisational commitment (Kristof-Brown, Zimmerman, and Johnson 2005). While the role of P–E fit on job satisfaction has been explored (e.g. Arthur, Bell, Villado, and Doverspike 2006; Kristof-Brown et al. 2005), findings support only a small to medium relationship.

More contemporary expressions of congruence and calling are known as Person–Vocation (P–V) fit and Person–Job (P–J) fit (Kristof-Brown and Guay 2011). In addition to calling and congruence is the role of personality – that is, some people appear to transcend the P–E fit and excel regardless. In most cases these people score high on measures of Conscientiousness and low on measures of Neuroticism (Barrick and Mount 1991). The basis for these different explanations of P–E fit and empirical evidence are briefly reviewed below but before we do so it is necessary to define success in terms of work outcomes. How do we know if people are a good fit for different job roles?

Predicting work outcomes

While there are various ways of measuring work outcomes, two frequently reported measures are satisfaction and tenure. Some measures such as the Job Descriptive Index (JDI; Bowling Green State University 2009) measure job satisfaction across a range of dimensions such as: work on present job, pay, and opportunities for promotion, supervision and co-workers as well as the job in general scale. Recent evidence (Judge and Kammeyer-Mueller 2012) promotes the use of specific measures when these are more relevant to the research question. The focus of this study, therefore, is satisfaction with work and time spent in the present job.

It’s a match that’s most important: the case of congruence

P–V fit theories suggest that the degree of P–E fit will increase as the characteristics of the person and the elected vocation become increasingly similar or congruent (Muchinsky and Monahan 1987). Of course it then follows that similar people are attracted to the same roles primarily because they share the same pattern of interests. These models underlie many of the traditional matching models used in vocational assessment. The best known of these models is Holland’s (1976) vocational fit model, also known as the Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC) model.

This model classifies jobs and people in terms of a three letter code where order of the letters is important. Typically, after completing a vocational assessment the individual will be given a three letter interest code (e.g. SAE) matching a range of similarly categorised vocations (e.g. SAE Teacher). Referring to various databases

(e.g. O*Net: US Department of Labour 2012) it is possible to obtain a three letter code for different occupations. Thus, by comparing individual letter codes to those of different professions it is possible to determine the degree of match or ‘congruence’ with different occupations. In this study individual interest scores were measured using The Birkman Method’s (TBM) Interest scales. These scales measure 10 general areas of occupational interests; including, Persuasive, Social, Scientific, Mechanical, Outdoor, Numerical, Clerical, Artistic, Literary and Musical model (see Birkman et al. 2008 for alignment evidence of convergent validity of TBM interests with RIASEC codes) resulting in a three letter code as per the RIASEC model. Interest codes for the four occupations investigated were obtained from the O*NET database as follows: Sales engineers (ERI); graphic artists (ARE); clergy (SEA) and teachers (SAE).

According to Holland’s theory then people with the same codes tend to be found in the same types of jobs. Thus, as the congruence between individual (e.g. personal interests) and the vocation increases (e.g. the interests required by the vocation), so too does the degree of P–E fit. The degree of fit is measured in terms of congruence. While some research has demonstrated the benefits of congruence across a range of organisational outcomes, including employee performance and turnover (Iddekinge, Roth, Putka & Lanivich, 2012), other evidence has been mixed. Meta-analyses by Assouline and Meir (1987) and Tranberg, Slane, and Ekeberg (1993) found mean congruency-job satisfaction correlations were not statistically significant. Tinsley (2000) further argued that, on the basis of past experiments, congruence between individual and occupational letter scores is not related to achievement (Assouline and Meir 1987), absenteeism (Heesacker, Elliott and Howe, 1988) and other occupational outcomes. Ishitani (2010) counter-argued that interest congruence was effective in explaining intrinsic components of job satisfaction. Yet to be explored is whether P–V fit works for some roles but not others. Based on congruence theory we expect that, although very different, role congruence will predict important work outcomes as measured by tenure and job satisfaction.

We don’t chose jobs – they choose us: the case of calling

The commitment to some vocations is recognised in the more traditional sense as a ‘calling’. A calling in the vocational sense is described as ‘work that a person perceives as his [or her] purpose in life’ (Hall and Chandler 2005, p.160). Having a calling is differentiated from having a job or a career, as the emphasis is placed on the work itself, rather than the extrinsically motivated outcomes commonly associated with a job or career, such as economic or career gains (Wrzesniewski, McCauley, Rozin, and Schwartz, 1997). While, in the past, calling has been associated with religiosity, more recent research suggests that many people feel a calling in their occupation that is unrelated to religion, and is more to do with individualistic notions of self-exploration and fulfilment (Wrzesniewski, Dekas, and Rosso 2009). We also see here an overlap with contemporary theories of positive psychology and the notion of flow promoted by Seligman, Csikszentmihalyi and others (Csikszentmihalyi 2002; Seligman 2002).

A sense of calling can have a significant impact, not only on one’s work life, but also on other aspects of one’s daily life. A strong sense of calling has been associated with higher work and life satisfaction, putting in more effort at work, greater motivation to remain in a job and a prosocial feeling that one’s work improves the

world around them (Wrzesniewski et al. 1997). It has also been associated with increased respect and trust between coworkers (Pratt and Dirks 2007) and greater self-efficacy and outcome expectations (Domene 2012). A sense of calling can also be associated with negative outcomes, such as higher levels of burnout (Vinje and Mittelmark 2007), potential exploitation by work organisation (Bunderson and Thompson 2009), greater likelihood of ignoring career advice from trusted mentors (Dobrow and Tosti-Kharas 2012) and decreased identification with work organisation (Pratt and Ashforth 2003). While only a more recently researched topic, it is apparent that a sense of calling can have a significant impact, either positive or negative, on one's work and daily life.

In our study we expect ratings of job satisfaction and tenure to be higher in those roles described as having a traditional calling such as clergy, than for sales engineers or graphic designers. Whether teaching represents a vocation or a calling is yet to be determined, although recent work by Bullough and Hall-Kenyon (2011, 2012) suggests it falls more into the latter than the former. There are also similarities shared in the three letter Holland code, although ordered differently (SEA for clergy and SAE for teachers): suggesting that the service orientation of the role is common to both.

Some people will always match: the case for personality

Whilst other models of P–E fit focus on work environments and whether people match, or complement these, personality-based theories focus more on the individual person, independent of the job role and organisation. The impact of personality traits on organisational outcomes, particularly the 'Big 5' personality traits of extraversion, conscientiousness, neuroticism, agreeableness and openness to experience (Costa and McCrae 1992) has been heavily investigated. Meta-analyses have consistently reported that the Big 5 contribute to outcomes such as job satisfaction (Bruk-Lee et al. 2009; Judge, Heller, and Mount 2002) and work performance (Barrick and Mount 1991; Judge and Bono 2001). Judge et al. (2002) reported that the five factor model of personality had an overall multiple correlation of $r = .41$ with job satisfaction. Of the aforementioned personality traits, four (neuroticism, extraversion, conscientiousness and agreeableness) correlate with job satisfaction, while openness to experience typically displays a near-zero correlation (Bruk-Lee et al. 2009; Judge et al. 2002). However, only the relationships between neuroticism and extraversion have been shown to hold across experimental contexts and presumably, different job types (Judge et al. 2002). New empirical findings challenge the vast majority of evidence, suggesting that the importance of different personality characteristics depends on specific jobs (e.g. Chernyshenko, Stark, and Drasgow 2011).

In this study Personality was measured using TBM (Birkman et al. 2008) via five scales developed specifically for the 'Big 5' personality construct framework. That is, TBM's Emotive dimension corresponds to the Big 5's Neuroticism, the Social dimension corresponds to Extraversion, the Process dimension corresponds to Conscientiousness, the Control dimension negatively corresponds to Agreeableness, and the Change dimension corresponds to Openness (refer to Birkman et al. 2008 for evidence of convergent validity of these Birkman dimensions and other personality assessments' scales). It is hypothesised that Conscientiousness, (operationalised by Process in our study), will positively predict tenure and satisfaction and Neuroticism (operationalised as Emotive) will negatively predict satisfaction

and tenure for only those roles not defined as callings (sales engineers and graphic artists).

It's the job that matters most: the case of job design

Contemporary models of P–E fit emphasise the importance of well-designed jobs (Muchinsky and Monahan 1987). One of the most influential job design models is the Job Characteristics Model (JCM; Hackman and Oldham 1975). This model identifies five characteristics – autonomy (i.e. the degree of an individual's control of their work), task significance (i.e. the importance of the work to others), feedback (i.e. how much performance-related feedback the job provides), skill variety (i.e. the range of skills used in the job) and task identity (i.e. the degree to which the worker 'owns' the work). These five environmental characteristics influence three psychological states, the degree of experienced meaningfulness (i.e. how important or meaningful the employee finds their work), the degree of experienced responsibility (i.e. how responsible the employee feels for their own output) and the degree of knowledge the employee has of their performance.

A large amount of research has been conducted investigating the five key job characteristics of the JCM (Grant, Fried, and Juillerat 2011) and the model has been updated by contemporary researchers (Morgeson and Humphrey 2006; Parker and Wall 1998, 2001; Parker, Wall, and Cordery 2001) to emphasise the more social aspects of environment and to expand the number of relevant characteristics. Multiple meta-analyses have shown consistent, positive relationships between JCM constructs and attitudinal and behavioural outcomes (e.g. Fried 1991; Fried and Ferris 1987; Humphrey, Nahrgang, and Morgeson 2007). In their meta-analysis, Humphrey et al. (2007) found motivational characteristics, including the level of autonomy, feedback, task identity, task significance and skill variety explained 34% of the variance in job satisfaction. Individually, all five variables were significantly associated with job satisfaction, with mean ρ values ranging from autonomy (mean $\rho = .48$), feedback (mean $\rho = .43$), skill variety (mean $\rho = .42$), task significance ($\rho = .41$) to task identity (mean $\rho = .31$).

Job characteristics are expected to predict job satisfaction and tenure beyond effects explained by personality for those roles not defined as callings (e.g. sales engineers and graphic artists).

Method

Participants

The hypotheses were tested using a US based workplace database ($n = 111,421$). From this database, a subset of participants was selected, according to their job titles. Participants from four job titles were selected: secondary school teachers (excluding special and vocational educators), graphic designers, clergy, and sales engineers. Participants with incomplete demographic information and/or ages less than 18 or greater than 67 (retirement age) were excluded, resulting in 481 secondary school teachers (202 male, 279 female; $M = 43.28$ years, $SD = 11.99$), 383 graphic designers (165 male, 218 female; $M = 40.90$ years, $SD = 10.79$), 795 clergy (680 males, 115 females; $M = 45.39$ years; $SD = 11.37$) and 309 sales engineers (265 males, 44 females; $M = 43.28$ years; $SD = 11.99$).

Materials

The database used contains data on job characteristics, personality, interests, demographic information, work satisfaction, age, and gender.

As outlined earlier personality was measured using TBM (Birkman et al. 2008) via five scales developed specifically for the 'Big 5' personality construct framework.

Job characteristics were measured using Hackman and Oldham's (1975) Job Diagnostic Survey operationalised on a 6-point scale (with 1 being 'none' and 6 being 'a very large amount'). Participants indicate the presence or absence of different job characteristics including skill variety, task identity, task significance, autonomy and feedback.

The dependent variable, work satisfaction, is a sub-facet of job satisfaction. It was measured in terms of satisfaction with the work itself as opposed to more general facets of satisfaction including compensation, promotional prospects, coworkers, and supervisor. The participants were asked: '*Think of the work you did in the position listed above. How accurately does each of the following words or phrases describe the work?*' and typical words presented included '*Challenging*' and '*Routine*'. The measure is based on the 'Work on Present Job' taken from the JDI (BGSU 2012) and includes most of the original items drawn from Roznowski's (1989) JDI item battery but replaces five (good, hot, healthful, on your feet, endless) with five new items (a source of pleasure, dull, interesting, awful, important). Work satisfaction items were operationalised on a 6-point scale (with 1 being '*highly inaccurate*' and 6 being '*highly accurate*'). It was deemed appropriate to focus on the work satisfaction scale in particular as other contextual elements such as pay and promotion were less aligned to the P-E fit we were interested in investigating. Judge and Kammeyer-Mueller (2012) recommend the use of more specific measures when the theory is context-specific and more precise instrumentation is required.

As outlined earlier, individual interest scores were measured by TBM's Interest scales. These scales measure ten general areas of occupational interests; including, Persuasive, Social, Scientific, Mechanical, Outdoor, Numerical, Clerical, Artistic, Literary and Musical mapped onto the RIASEC model Job codes were obtained from the O*NET database (US Department of Labour, 2012).

Procedure

Congruence (i.e. the degree of match between the interest profile scores and the current role) and was measured using Iachan Agreement Index scores (Shears and Harvey-Beavis 2001, 10). This involves matching the three letters of the interest profile with the three letters of the occupation and assigning scores ranging from 22 (where both first letters match) to 1 (where the third letters match). The JCM was operationalised using items from the JDS (i.e. degree of autonomy, feedback, skill variety, task identity and task significance). The age variable in this study was calculated by subtracting the year of assessment from year of birth. This enabled a comparison of the contribution of demographic, personality, congruence and job characteristics across 1968 people in four different job types.

Results

MANOVAS were conducted comparing the four roles on measures of job satisfaction, motivating potential score, personality variables and job characteristics.

Four sets of two hierarchical multiple regression analyses were then conducted for each of four job titles across the two outcomes measures: work satisfaction and tenure.

Is there such a thing as calling?

Firstly we wanted to find evidence of calling by determining whether clergy and teaching were alike and different from sales engineers and graphic artists. Earlier it was hypothesised that those roles described as callings (i.e. clergy and teachers) would report higher levels of work satisfaction, be less influenced by job design and have greater congruence. Results of analysis suggest significant differences in terms of work satisfaction, $F(3,1964) = 58.90, p < .001$. Post-hoc comparisons using the Tukey HSD test indicated that Clergy reported significantly higher levels of work satisfaction ($M = 62.96, SD = 8.20$) than the other occupations (sales engineers, $M = 58.14, SD = 10.33$; graphic designers, $M = 55.43, SD = 11.80$; teachers, $M = 58.91, SD = 9.56; p < .001$) but not significant differences on the job characteristics of task identity (Clergy, $M = 4.5, SD = 1.00$; Teachers, $M = 4.63, SD = 1.00$; $p = .152$) or task significance (Clergy, $M = 5.03, SD = .83$; Teachers, $M = 5.02, SD = .98; p = 1.000$) to teachers or on feedback to sales engineers ($M = 4.32, SD = 1.04$; Clergy, $M = 4.18, SD = .1.09; p = .273$) and teachers ($M = 4.19, SD = 1.10; p = 1.00$). Teachers' work satisfaction was more aligned to that of sales engineers. Those people reporting the greatest similarity between their chosen roles and interests were graphic artists ($M = 12.38, SD = 9.40$), while clergy were likely to have the least congruent scores ($M = 3.64, SD = 4.76$) suggesting that calling took precedence over alignment of interests, without detriment to work satisfaction.

The significance of congruence, calling and personality in predicting work outcomes

Results are presented in Table 2 (work satisfaction) and Table 3 (tenure). Demographic information was entered in the first step, personality variables in the second, and the different models explaining P–E fit (i.e. congruence and job characteristics) were entered in the third step. For teachers, the total variance in work satisfaction explained by the model as a whole was 35.1%, for clergy 26.0%, sales engineers 39.1%, and for graphic designers 47.7%.

In Table 3 the analysis was repeated with tenure as the outcome measure. Age was a significant predictor of tenure across all job roles with older employees more likely to be in roles for longer. Female clergy were more likely to stay for longer than male clergy, and female teachers more likely to stay longer than male teachers. For teachers, the total variance in tenure explained by the model as a whole was 37.8%, for clergy 24.3%, for sales engineers 10.4%, and graphic designers 28.5%.

Reference to Tables 2 and 3 indicate no significant contribution of interest congruence to work satisfaction or tenure. In general, much of the variance in work satisfaction could be explained by the combined contribution of the various job characteristics and personality variables. Models of job design were more persuasive in predicting work satisfaction with some elements consistent across all four job types (e.g. autonomy, task significance, variety) but other elements more significant in some roles than others (e.g. feedback and task identity).

Table 1. Means and SDs comparing variable across four job types.

Variables	Role				
	Sales (n = 309)	Graphic Designer (n = 383)	Teacher (n = 481)	Clergy (n = 795)	Total (n = 1968)
Emotion	4.63 (4.81)	6.86 (5.362)	6.94 (5.41)	5.88 (4.65)	6.13 (5.07)
Social	18.52 (4.81)	15.32 (6.15)	15.98 (5.14)	17.85 (4.51)	17.00 (4.99)
Process	9.36 (2.81)	9.05 (2.94)	9.22 (3.10)	8.36 (3.04)	8.86 (3.03)
Control	6.22 (3.42)	5.08 (3.41)	5.23 (3.36)	5.06 (2.82)	5.29 (3.20)
Change	3.47 (1.94)	3.02 (1.89)	3.44 (1.90)	3.38 (1.92)	3.34 (1.92)
Work	58.14 (10.33)	55.43 (11.80)	58.91 (9.56)	62.96 (8.20)	59.75 (10.08)
Satisfaction					
Variety	4.73 (1.00)	4.57 (1.05)	4.71 (.96)	5.06 (.82)	4.83 (.95)
Task Identity	4.75 (.90)	5.06 (.91)	4.63 (1.00)	4.50 (1.00)	4.68 (.99)
Task	4.66 (.99)	4.57 (1.10)	5.02 (.98)	5.03 (.83)	4.88 (.97)
Significance					
Feedback	4.32 (1.04)	4.40 (1.12)	4.19 (1.10)	4.18 (1.09)	4.25 (1.09)
Autonomy	5.08 (.88)	4.38 (1.09)	4.42 (1.01)	5.02 (.86)	4.76 (1.00)
MPS	106.84 (43.78)	95.76 (45.42)	92.23 (43.45)	105.02 (42.86)	100.38 (44.03)
Iachan	12.38 (9.40)	13.92 (8.44)	5.97 (5.64)	3.64 (4.76)	7.58 (7.93)

Personality appeared to also make a significant contribution, explaining variance in scores of work satisfaction beyond that already explained by demographics. Of the personality variables, Conscientiousness (as measured by Process scale) and Neuroticism (as measured by Emotive scale) accounted for the greatest variance in outcomes, although there were some differences in scores across the different job types. As hypothesised, higher scores on the TBM Emotive scale, which correspond to the Big 5 personality trait of Neuroticism (Birkman et al. 2008), were significantly related to lower work satisfaction for three of the four job types. The TBM Emotive scale was significantly negatively related to work satisfaction most particularly for teachers, clergy and sales engineers although not graphic designers.

Discussion

The present research aimed to compare the significance of calling, interest congruence, personality, and job characteristics on work satisfaction and tenure. Overall, the results suggest that while both personality and demographic variables account for variance in work satisfaction and tenure scores, and job characteristics account for additional variance in satisfaction, no such relationship was observed for interest congruence.

The significance of calling

Despite the fact that notions of calling have been expanded to include a broader range of roles, our research suggests that the more traditional definition still has significance. In many ways, clergy reported different characteristics to the other three vocations. They were significantly more satisfied, and more likely to stay. Whilst it has often been debated whether teaching is a calling, we were unable to find any

Table 2. Hierarchical linear regression using personality, congruence and job characteristics as predictors of work satisfaction across four job types.

Predictor	Job titles											
	Teachers			Clergy			Sales engineers			Graphic designers		
	ΔR^2	β		ΔR^2	β		ΔR^2	β		ΔR^2	β	
Step 1	.032*			.023*			.054*			.026*		
Age		.169*	.020		.146*	.230*		.130*				
Gender		.059	.146*			-.019		.091				
Step 2	.058*			.083*			.081*			.064*		
Process		.120*	-.033			.016		.114*				
Social		.059	.069		.014	.069		.069				
Change		-.051	.060		.028	.028		-.016				
Control		.039	-.039			-.012		-.030				
Emotive		-.133	-.256*			-.216*		-.121				
Step 3	.279*			.166*			.282*			.404*		
Congruence		-.062	-.055			-.070		.023				
Variety		.176*	.154*			.219*		.300*				
Task Identity		.229*	.058			.169*		.106*				
Task Significance		.133	.212*			.183*		.372*				
Feedback		.140	.050			.073		.130*				
Autonomy		.113	.145*			.139*		.363*				
Total R^2	.351*			.260*			.391*			.477*		
N	481		795			309		383				

* indicates significance level of $p < .05$.

Table 3. Hierarchical linear regression using personality, congruence and job characteristics as predictors of tenure across four job types.

Predictor	Job titles											
	Teachers			Clergy			Sales engineers			Graphic designers		
	ΔR^2	β		ΔR^2	β		ΔR^2	β		ΔR^2	β	
Step 1	.366*			.222*			.108*			.291*		
Age	.598*		.481*		.311*							.540*
Gender	-.083*		-.120*		-.082							-.040
Step 2	.014		.011*		.008		.008		.010			
Process	-.036		.007		-.036							-.036
Social	-.052		-.071*		.043							-.112*
Change	-.022		.058		.008							.011
Control	.103*		.051		.065							-.001
Emotive	-.003		-.011		-.047							-.092
Step 3	.015		.010		.025		.008					
Congruence	.044		.021		-.070							-.031
Variety	-.062		.064		.049							-.008
Task Identity	.036		-.002		.040							.025
Task Significance	.052		-.010		-.014							.071
Feedback	-.041*		-.003		.102							-.016
Autonomy	-.077*		.064		.001							.021
Total R^2	.378		.243*		.104		.285					
N	481		795		309		383					

*indicates significance level of $p < .05$.

evidence of it here. In some ways the pattern of responding by teachers was more reflective of sales engineers than of clergy.

The role of congruence

No support was found for the hypothesis that interest congruence predicted job satisfaction. These results are most consistent with earlier studies that suggest any interest congruence-job satisfaction relationship is, at best, small (e.g. Assouline and Meir 1987; Tranberg et al. 1993). Our finding contradicts recent research by Rottinghaus et al. (2009) who examined the relationship between interests and job satisfaction in 22 different job titles, suggesting that Holland's (1976, 1997) RIASEC model was able to predict job satisfaction. One reason for the difference may be that, in the present study, the dependent variable is work satisfaction, whereas studies supporting the interest congruence-satisfaction relationship have tended to use broader satisfaction measures. For example, Rottinghaus et al. (2009), measured job satisfaction with just one item 'How satisfied are you with your general line of work?' and arguably, this measure focuses more on an overall career or vocational satisfaction, rather than satisfaction in the current job. The present study used a work satisfaction measure wherein items focused much more specifically on the raters' current work (e.g. 'How accurately does each of the words or phrases describe the work?') to reach an aggregate measure of work satisfaction. The difference however may be immaterial given that previous studies (e.g. Carless 2004; Perdue, Reardon, and Peterson 2007) report correlations between the Work on Present Job and Job in General subscales as 0.78 and 0.74 respectively. Studies such as Rottinghaus et al. (2009) are measuring some form of more general career satisfaction, while the present study has focused more on satisfaction in a specific, current job. This raises an important question underlying assumptions about the use of matching models in vocational settings. If interest congruence does not predict satisfaction or tenure at work, then what does it predict?

The role of personality

Mixed results were found such that personality constructs accounting for variance in work satisfaction and tenure were different across job types. Results on the Emotive and Process scales of TBM were generally consistent with the findings in the extant literature that Conscientiousness positively, and Neuroticism negatively, relates to work satisfaction. Consistency across job types suggests that the relationship between Neuroticism and work satisfaction generalises across experimental contexts (Judge et al. 2002). The current finding is consistent with past research (e.g. Bruk-Lee et al. 2009; Judge et al. 2002) that suggests some, but not all personality traits are associated with work satisfaction. Overall, the pattern of results seems to suggest that the relationship between personality traits and work satisfaction is influenced by the contextual factor of job type. Thus, even with meta-analytic (Bruk-Lee et al. 2009; Judge et al. 2002) evidence suggesting that in general, Neuroticism and Extraversion predict work satisfaction across many contexts, even these may not necessarily predict work satisfaction across *all* job types.

The role of job design

The hypothesis that job characteristics, as measured by the Job Diagnostic Survey, would predict work satisfaction was supported in a majority of cases. Consistent with other literature (Grant et al. 2011), higher levels of autonomy, task significance and skill variety predicted greater work satisfaction regardless of job title, while task identity and feedback were significant predictors of work satisfaction for at least two job types.

The relative contribution of personality and job characteristics to work satisfaction is an issue that has been frequently debated in the literature (e.g. Thomas, Buboltz, and Winkelspecht 2004) and some evidence suggests that job characteristics may mediate the relationship between personality and job satisfaction (e.g. Judge, Bono, and Locke 2000), although it has also been suggested that personality variables may moderate the relationship between job characteristics and work satisfaction (e.g. Grant et al. 2011). While analysis was limited in that it did not explore any moderating or mediating effects, the present findings suggest that both job characteristics and personality are able to explain additional variance in work satisfaction.

Further considerations and future research directions

In addition to those previously discussed, there are several limitations of the present study. First, several ‘degrees of inference’ have been made from the data. For example, in order to test Holland’s (1997) RIASEC model, TBM’s ten general occupational interests were reduced to six, based on the correlations between TBM interest scales and Holland’s (1994) SDS interest scales. Then, the individual letter RIASEC letter codes that were produced from this reduction were then matched with vocational interest codes from the O*NET (US Department of Labour 2012) database. While the O*NET database uses the RIASEC model, these vocational interest codes are measured using an O*NET specific scale, the Interest Profiler (e.g. Rounds et al. 1999). A review of current research did not reveal any studies that have explored the relationship between the SDS (Holland 1994) and O*NET Interest Profiler (Rounds et al. 1999).

Most importantly the study provides guidelines for encouraging job satisfaction at work. In concluding, it would appear that job satisfaction is best determined by firstly recruiting those people with high levels of conscientiousness and lower levels of neuroticism then designing jobs well. The notion of calling and its religious origins may still have some merit. Clear differences were identified between clergy and other job roles. But whilst there appears a case to support the merits of ‘calling’, there is still no case for the role of congruence.

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