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PERSON-ENVIRONMENT FIT AND TURNOVER INTENTIONS OF SENIOR HIGH SCHOOL TEACHERS IN GHANA

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Abstract
The government of Ghana spends a considerable amount of the national budget on training and recruiting teachers every year, but reports indicate that about 10,000 teachers leave the classroom annually for various reasons. Retention of qualified teachers has therefore become a challenge in schools to ensure quality teaching and learning. The current study investigated the extent to which teachers' person-environment fit predicts their turnover intentions through their career commitment. The study employed the cross-sectional survey design with a sample of 919, comprising 705 males and 214 females. This consisted of 243 teachers in the rural setting, 282 in the peri-urban and 394 in the urban setting. The Partial Least Square-Structural Equation Modelling was used for the analysis. The results indicated that career commitment had a strong negative relationship with turnover intentions. Also, the person-job fit and person-organisation fit dimensions of the person-environment fit measure significantly predicted career commitment and turnover intentions such that higher scores on these person-fit dimensions could lead to higher commitment, and reduced intention to leave the teaching service. The findings were discussed and practical implications and recommendations were made. Among others, the authors recommend that the selection process for recruiting teachers should consider using job screening psychological tests to hire individuals who fit the teaching profession and the academic environment.

Keywords: person-environment fit; career commitment; turnover intentions; secondary school teachers

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Introduction

Empirical studies indicate that teachers are the most important in-school factor in student achievement gains (Hanushek, Kain, O'Brien, & Rivkin, 2005; Kane & Staiger, 2008; Nye, Konstantopoulos, & Hedges, 2004). Hence, efforts to improve public education must essentially address the human capital teachers bring to their classrooms (Pil & Leana, 2009). Pil and Leana further emphasise that, public schools are organisations where rational and informational processes are deemed critical for performance. The implication is that teacher recruitment and retention must necessarily underscore economic perspectives such as labour market effects or supply and demand (Borman & Dowling, 2008) and ensure that eager and committed teachers are engaged and retained in the classroom.

Policy makers and school leaders in Ghana encounter the challenge of retaining qualified teachers in schools to ensure quality teaching and learning (Cobbold, 2007; 2010). About 10,000 teachers leave the classroom for various reasons (GES, 2012), creating teacher shortages (Koomson, 2005). It has been underscored that 50 percent of Ghanaian teachers sampled in a survey indicated that they would want to quit teaching before they retired. Reasons for their intention to leave included higher pay (24.8 per cent), improved conditions of service (59.8 per cent), change of profession (6.5 per cent) and other reasons (8.9 per cent) (GES, 2012). Previous studies aimed at investigating the causal factors of the teacher attrition problem focused mainly on teacher motivation, work conditions and quality of infrastructure (*e.g.*, Cobbold, 2007; 2010; GES, 2012; Koomson, 2005; Sam, Effah, & Osei-Owusu, 2014). Stakeholder interventions in Ghana based on these researches therefore led to the introduction of the Single Spine Pay Policy, the best Teacher Award Scheme and other measures to enhance the work experiences of teachers (Sam et al., 2014). These measures were meant to motivate teachers, curb the teacher attrition and improve retention, but it seems that the measures are not achieving the intended objectives.

Even though teachers are said to be leaving the service, another twist indicates otherwise. According to data from the GES, the total number of teachers in public senior high schools increased by 7.5% from 36,372 in 2015/2016 to 39,096 in 2016/2017 (EMIS, 2016). This was when the total number of schools increased by 7.3% from 578 to 620 over same periods. The researchers wondered what the missing link actually is. We therefore thought it

was time to begin looking at career anchors, person-environment fit and career commitment, which have been found to have strong links with employees' work attitude, behaviour and performance (Caplan, Tripathi, & Naidu, 1985; Cobbold & Asamani, 2015; Feldman & Bolino, 1996; Schein, 1990; Su, Murdock, & Rounds, 2015).

The only study found in the literature in Ghana in this area was on career orientation and turnover intentions of Basic School teachers in Cape Coast Metropolis (Cobbold & Asamani, 2015). Cobbold and Asamani's study was narrow focused and did not include person-environment fit and career commitment of teachers. In addition, Cobbold and Asamani recommended further broadly focused study in this area to inform national policy and practice.

This study therefore sought to understand how person-environment fit is related to teachers' commitment to their profession and their intention to leave the teaching profession or switching schools, building on existing research regarding teacher mobility. This paper is a project conducted among senior high school teachers sampled from six regions in Ghana.

Objective

The main objective of this study is to examine the extent to which person-environment fit and career commitment of senior high school teachers predict their turnover intentions.

Specifically, the study investigated the extent to which:

- person-environment fit of senior high school teachers predicts turnover intentions
- person-environment fit of senior high school teachers predicts career commitment
- career commitment of senior high school teachers predicts their turnover intentions
- career commitment of senior high school teachers mediates the relationship between person-environment fit dimensions and turnover intentions

Person-Environment (PE) fit and turnover intentions

Person-Environment (PE) fit is a critical factor in career planning decision making and adjustment. Literature makes it clear that several and variety of person-environment fit dimensions exist, vis-a-vis Person-Organisational fit,

Person-Job-fit, Person-Vocation fit, Person-Group fit and Person-supervisor fit (Kristof-Brown, 2006). However, with the various types of fit, Person-organisation fit and Person-job fit are the most studied (Aichia & Sackett, 2005).

The current study used four dimensions of person-environment fit which are person-organisation fit, person-job fit, person-group fit, and person-supervisor fit. Person-organisation fit connotes "the compatibility between people and their organisations" (Kristof-Brown, Zimmerman, & Johnson 2005, p. 285), while Person-job fit denotes "congruence or match between a person's characteristics and those of the job or tasks that are performed at work" (Lee, Reiche, & Song, 2010). Thus, Person-job fit is measured on one hand as the match of employees' knowledge, skills and ability with the job requirements and the other as the fit of employee's needs, desire and preferences with the job itself (Kristof-Brown, Zimmerman, & Johnson, 2005).

Behery (2009) posits that employees who are motivated and committed to their organisation are not overly concerned about possible career changes. Such employees also experience career satisfaction and career success which may be ascribed to their job stability (Ehrhart & Makransky, 2007) and this is reflected in PE fit with factors such as anxiety and depression (Caplan, Tripathi, & Naidu, 1985). When individuals achieve congruence between their career anchor and the demands or the environment of their work, they are more likely to attain positive career outcomes, such as job effectiveness, career satisfaction and stability (Schein, 1990). Feldman and Bolino (1996) observed that the availability of reasonable alternative jobs and external personal life constraints moderate the relationship between career anchor congruence and career outcomes. Besides, when employees perceive to fit with their environment, they are more satisfied with their jobs (Gregory, Albritton, & Osmonbekov, 2010), lessening the probability of their intentions to leave or actual turnover (Wheeler, Gallagher, Brouer, & Sablynski, 2007).

Su, Murdock and Rounds (2015) indicated that the mere knowledge about person-environment fit has been found to be invaluable in understanding and solving career-related issues. Su et al. (2015) noted further that "assessment of relevant constructs pertaining to the individual and the environment is a key part of career counselling from the person-environment fit perspective, as the results are incorporated into counselling to assist clients in their career development" (p. 83). Empirical evidence suggests that there is positive

relationship between person-environment fit and organisational outcomes, such as overall job performance, task performance, contextual performance, and intentions to maintain organisational membership (Kristof-Brown, 2006). Furthermore, Lin, Yu and Yic (2014) and Farooqui and Nagendra (2014) found that there is a significant relationship between person-organisation fit and performance. person-job fit has also a significant positive relationship with job performance (June & Rosli, 2011).

Career commitment and turnover intentions

Career commitment is defined as "the strength of one's motivation to work in a chosen career role" (Hall, 1971, p. 59). Individual's career commitment is a reflection of work commitment that the employees have towards their careers and could be linked to desired career outcomes. The extent to which employees are committed to their jobs is critical to the success or other wise of the work organisation. Noordin, William and Zimmer (2002) maintain that changing work environments and the pace of careers in organisations increase employee commitment to their careers and perhaps less or conditional commitment to their organisations. It has been established that employees with a strong degree of career commitment and higher levels of career expectations may invest substantially in their careers (Aryee & Tan, 1992). While, Day and Allen (2004) found career commitment to be positively related to career satisfaction in the case of municipal employees, Carson, Carson, Roe, Birkenmeier and Phillips (1999) linked career commitment and organisational commitment to work-related outcomes. Carson, Carson, Roe, Birkenmeier and Phillips revealed that persons who appraised highly on career commitment reported greater career satisfaction, hence intentions to stay in the organisation, than those rated low on career commitment. Kaur, Sahi and Mahajan (2014) underscored the importance of employee commitments, and studies by Fiorito, Bozeman, Young and Meurs (2007), and Wright and Bonett (2002), have concluded that employees' commitment predicts significant variables such as performance and intention to quit. Commitment to an organisation has to do with a working attitude of workers who identify themselves with and to accomplish the organisational goals and maintain good relationship with members within the organisation (Robbins, 2001). Meanwhile, Mowday, Porter and Steers (*as cited in* Paragsa, 2014) corroborated that teachers' commitment is their emotional identification and

loyalty with school goals and values coupled with their readiness to be seen as members and support the educational vision within the organisation.

However, people do not always get jobs which match their career anchors, and this affects their career experiences and outcomes (Schein, 1990).

From the foregoing we have made the following assumptions that undergird the study:

a) People seek out and create environments that allow them to behaviourally manifest their traits (*e.g.*, dominant individuals seek leadership positions);
b) The extent to which people fit their work environments has significant consequences (*e.g.*, satisfaction, performance, stress, productivity, turnover), with better fit associated with better outcomes.

Huselid and Day (1991) have demonstrated that commitment phenomena have been extensively explored as a result of its significant effect on individual attitudes and behaviours (turnover and commitment) at the workplace. They argue that turnover indicates a breach in the relationship between individuals and the organisation and incurs a significant amount of costs to the organisation and to the individuals. Costs of turnover consist of opportunity costs, costs required for reselection and retraining, and decreased level of morale of the remaining workers. These costs would become even more serious when the organisation loses valued employees (Huselid & Day, 1991). It is therefore crucial to consider turnover in relation to commitment in the case of teachers in Ghana.

Hypotheses

The following hypotheses were tested:

- H_1: Senior high school teachers' person-environment-fit will predict their (a) turnover intentions (b) career commitment.
- H_2: Senior high school teachers' person-environment fit will predict their career commitment.
- H_3: Senior high school teachers' career commitment will mediate the relationships between their (a) person-environment fit dimensions (b) turnover intentions.

Method

Population

The target population for the study was all Senior High School teachers in public schools in Ghana. The total number of teachers in public senior high schools is 39,096, comprising 30,170 males and 8,926 females (EMIS, 2016/2017, GES). The accessible population was 26,222 from six regions randomly selected. The distribution is presented in Table 1.

Table 1. Distribution of accessible population by gender

Region	Males	Females	Total
Northern	2300	298	2598
Upper West	1047	195	1242
Ashanti	6525	2286	8811
Eastern	4357	1493	5850
Greater Accra	1944	1248	3192
Volta	3773	756	4529
Total	19946	6,276	26,222

Source: (EMIS, 2016/2017, GES)

Sample and Sampling Procedure

Multi-stage sampling procedure was used to obtain the respondents for the study. The first stage of the sampling involved dividing the country into three belts: Northern *(Northern, Upper East, and Upper West regions)*, Middle *(Brong Ahafo, Ashanti, and Eastern regions)* and Southern *(Central, Greater Accra, Western, and Volta regions)*. Two regions were then randomly selected from each belt as follows: Northern *(Northern, Upper West)*, Middle *(Ashanti, Eastern)* and Southern *(Greater Accra, Volta)*. Having selected the regions, 30 percent of the total number of public senior high schools in each region was obtained using the stratified random sampling procedure. There were 339 senior high schools in the six selected schools, and 101 were selected. The total number of teachers in the 101 schools selected from the six regions was 5472, comprising 4112 males and 1360 females. Table 2 presents the distribution of the total regional composite of the number of teachers in the selected schools, and the sample from each region.

Table 2. Distribution of number of teachers and sample taken from the selected schools in the regions

Region	Males		Females		Total	
	Population	Sample	Population	Sample	Population	Sample
Northern	468	158	72	20	540	178
Upper West	175	72	51	13	226	85
Ashanti	1110	448	403	157	1513	605
Eastern	987	299	320	102	1307	401
Greater Accra	584	134	328	86	912	220
Volta	788	259	186	52	974	311
Total	4112	1370	1360	430	5472	1800

The final stage involved giving all teachers in the selected schools in the study equal chances of being selected, and those who consented to take part were given the questionnaire to complete. Considering that *power analysis and sample size estimation* are important aspects of all studies and help to obtain appropriate sample size for a given study, we used the a-priori sample size calculator (Soper, 2016). The number of observed and latent variables in the model, the anticipated effect size, and the desired probability and statistical power level are required for this estimation. For this study, there are 5 latent variables, comprising 15 dimensions and 90 indicators. Given the probability (alpha) level of .05, anticipated effect size of .3 (large effect size for SEM: Cohen, 1988) and the desired statistical power level of .9, the recommended minimum sample size for this study, which used PLS-SEM, is 256 (Soper, 2016).

We decided to also consult the sample size determination table (The Research Advisor, 2006) to ensure we had sufficiently large sample for our study. The total accessible population was approximately 26,000. At the 95% confidence, and 3.5% margin of error, recommended sample sizes is approximately 760. We however, increased the original sample to 1800 to cater for non-response, incomplete and influential cases. The stratified random sampling technique was then used within each sub-group to select the specific number of teachers. Proportionately, we sampled 1370 male teachers and 430 female teachers, selected proportionately from each school. The regional composites are provided in Table 3.

In all, one thousand, one hundred and twenty-nine (1129) teachers returned their completed questionnaires, a response rate of 62.72%. Two hundred and ten (210) of the questionnaires obtained were rejected during data cleaning

and editing, due to significant omissions in the completion and influential cases. Therefore, 919 responses were used for the analysis. Generally, there are more male teachers at the senior high schools than females, which reflected in the sample. Our sample consisted of 76.7% males and 23.3% females, with mean age of 37.89 years; SD=8.16. Table 3 presents the characteristics of the respondents. Essentially, all the respondents were Ghanaians, had at least bachelor's degree, and had taught for at least 1 year, with the average years of teaching being 12.71. Most of the teachers were married (63.4%), with a few having divorced (7.7%).

Table 3. Characteristics of respondents

Variable	Frequency	Percentage
SEX		
Male	705	76.7
Female	214	23.3
LOCATION		
Rural	243	26.4
Urban	394	42.9
Peri-Urban	282	30.7
EDUCATIONAL LEVEL		
First Degree	695	75.6
Master's	214	23.3
PhD	10	1.1
MARITAL STATUS		
Never Married	258	28.1
Married	583	63.4
Divorced	71	7.7
Widowed	7	.8
AGE		
Mean age: 37.89, SD = 8.16	Below 38 years: 455 (49.51%)	38 years and above: 464 (50.49%)
YEARS OF TEACHING		
Average years of teaching: 12.71 years, SD = 7.58	13 years and above: 440 (49.72%)	Below 13 years: 445 (50.28%)
YEARS OF TEACHING IN CURRENT SCHOOL		
Years teaching in current sch: 5.81, SD=4.82	6 years and above: 405 (45.40%)	Below 6 years: 487 (54.60%)

Data Collection Procedure

The adapted questionnaire was given to the sampled teachers to complete and return either immediately or within three days. The data were collected within three months (Oct-Dec, 2018), using the set of questionnaires. Two

Principal Research Assistants helped in the collection of the data. The researchers, together with the research assistants administered the questionnaire to the teachers that were sampled and have given their informed consents to take part in the study. The completion and collection of the questionnaire were done at the schools, or any convenient place for the respondents.

Research instrument

Three main measures were for the exogenous and endogenous variables in this study and relevant literature were reviewed on them. The scales are described below.

Person-Environment Fit Scale. Person-Environment fit is a measure of the degree of compatibility between an individual and a particular work environment that occurs when their characteristics are well matched (Kristof-Brown, Zimmerman, & Johnson, 2005). Person-environment fit in this study was measured with items adapted from the Perception of Person-Environment Fit Scale (Chuang, Shen, & Judge, 2016) and (Grogan & Young, 2011). The original scale consists of four dimensions: The Person-Job Fit Scale (PJFS), the Person-Organization Fit Scale (POFS), the Person-Group Fit Scale (PGFS), and the Person-Supervisor Fit Scale (PSFS) and we used the same dimensions.

The scale for the present study consists of 26 items and rated on a seven-point scale from 1 (No Match) to 7 (Complete Match). Reported reliabilities (Chuang, Shen, & Judge, 2016; Grogan & Young, 2011) for the four sub-scales are: PJFS, .84 (4-item), POSF, .91 (7-item), PGFS, .89 (10 items) and PSFS, .90 (5-item). These four types of person-environment fit have emerged over the years as the most studied phenomena and have significant practical implication (Kristof-Brown, & Guay, 2011). They have been found to have conceptual and practical implications on work attitudes, turnover, performance, job search, and managerial selection decisions (Kristof-Brown et al., 2005).

The reliability coefficients obtained for this scale from the current study was .88, with sub-scale reliabilities ranging between .62 (person-job fit) and .92 (person-supervisor fit). Table 4 presents the score ranges and reliability coefficients of the person-environment fit, career commitment and turnover intentions scales.

*Turnover Intentions Measure.*The turnover intention was measured with a 6-item scale known as TIS-6 (Bothma & Roodt, 2013). This scale has been used widely and found to have good psychometric properties. The items ask respondents to indicate the extent to which they agree or disagree with each statement regarding job choices and rated on a 5-point Likert-type of scale ranging from 1 (Extremely Disagree) to 5 (Extremely Agree). The scale has reported reliability of .77 and above (e.g. Liu, 2005). The reliability coefficient alpha obtained for the current sample was .71.

Career Commitment Scale. Career commitment in this study refers to teachers' attitude towards the profession. Career commitment in this study was measured with a ten-item scale. This consists of adapted Blau's (1989) 7-item Career Commitment Scale (CCS) and three other items obtained from literature. The scale is rated on a 5-point Likert-type of scale with scores ranging from 5 to 35. Three items: items 1, 3 and 7 are reverse scored. The scale has a reported reliability of alpha between .76 and .84, an internal consistency, which has ranged from .87 and .85, and a test-retest reliability of .67 (Bedeian, Kemery, & Pizzolatto, 1991; Blau, 1985). For this study, the scale was pilot-tested (Cronbach's alpha of .81) before use and the reliability coefficients obtained (.80 for the main study) are reported in Table 4.

Pilot Testing of Research Instrument. Given that most of our research instruments were adapted, a pilot testing was done to assess the theoretical and context appropriateness of all the instruments. Necessary revisions from the pilot testing were made before the main study. After the sample for the main study was done, two public senior high schools in Cape Coast Metropolis that did not form part of the main sample were conveniently used for the pilot-testing involving 63 teachers.

There is no agreed upon sample size that is considered adequate for pilot testing of study instrument (Hertog, 2008) because other factors must be taken into consideration. Some authors recommend using 10% of the sample projected for the main study (*e.g.*, Connelly, 2008; Treece &Treece, 1982), while others suggest between 10 and 30 respondents (Hill, 1998), or 12 respondents (Julious, 2005; van Belle, 2002).

The reliability analysis of the pilot-testing is shown in Table 4. All items demonstrated satisfactory reliability. Nunnally (1994) suggests that at the early stage of a study involving new measures of a construct, moderate reliability

coefficients between .50 and .60 are acceptable because there may be sampling error in the standardization sample.

Table 4. Score ranges and reliability coefficients of the dimensions of Person-Environment fit, career commitment and turnover intentions scales

Dimensions	No of items	Score range	Reported reliability	Pilot	Main reliability
Person-job fit	4	4- 24	.84	.71	.62
Person-organisation fit	7	7 – 42	.91	.84	.83
Person-group fit	10	6 – 60	.89	.74	.77
Person-supervisor fit	5	5 – 30	.90	.89	.92
Overall	26	26 – 156	.89	.87	.88
Career Commitment	7	7 – 42	.78	81	.80
Turnover intentions	6	6 – 36	.83	.67	.71

Research design

The design used for the study was the cross-sectional survey. A cross-sectional survey involves data collection at a particular point in time from a sample drawn from a specific population (Singleton & Straits, 2010). The cross-sectional survey gives us the opportunity to assess relationships between our variables (career orientations, person environment fit and turnover intentions) and differences between subgroups in the population of study (Visser, Krosnick, & Lavrakas, 2000). The cross-sectional survey has been widely used to investigate issues in social science and education with great success and have been the most used research design in Social Science investigation (Visser, Krosnick, & Lavrakas, 2000). This study employed the cross-sectional survey because questionnaire was used to elicit responses from a cross section of teachers of diverse demographic backgrounds and experiences.

Data analysis procedure

The Partial Least Square Structural Equation Modelling (PLS-SEM) or Variance-based SEM (Garson, 2016) was used to test the hypotheses in this study. The use of SEM enabled the researchers to connect all the exogenous variable paths to the dependent variables in the same model and analyze all the paths simultaneously rather than one at a time (Gefen, Straub, & Boudreau, 2000). This study used three latent variables: two exogenous (person-environment fit and career commitment), and one endogenous (turnover intentions). Person-environment fit has 4 dimensions and one dimension each for

turnover intentions and career commitment. This means a total of 6 dimensions are involved in this study, in addition to work experience. The use of SEM enabled all the direct and indirect effects to be tested simultaneously.

This study predicted turnover intentions and career commitment of public school teachers in Ghana. The SmartPLS 3.2.6 software developed by Ringle, Wende and Will (2005) was used for the analysis. This has been deemed to be one of the principal and most developed software applications for PLS-SEM.

Results

Table 5 presents the means and standard deviations of the variables, with their sub-scale scores, measured in the study. The mean scores were evaluated against the scoring criteria and score ranges (as presented in Table 4), and it emerged that the scores on all the variables, together with their sub-scale scores were within the moderate level.

Table 5. Means and standard deviations of measures

Variable	M	SD
Person-environment fit	140.99	21.71
Person-organisation fit	59.00	11.38
Person-Group fit	33.58	5.91
Person-supervisor fit	16.94	6.03
Person-job fit	31.45	6.07
Career commitment	34.46	8.80
Turnover intentions	19.44	5.79

The results of the three hypotheses in this paper are presented in Table 6 and Figure 1 presents the structural model of the analysis for the test of the three hypotheses.

H1: Teachers' person-environment fit dimensions will predict their (a) career commitment, and (b) turnover intention

H2: Career commitment will predict turnover intentions

H3: Career commitment will mediate the relationships between PE fit dimensions and turnover intentions

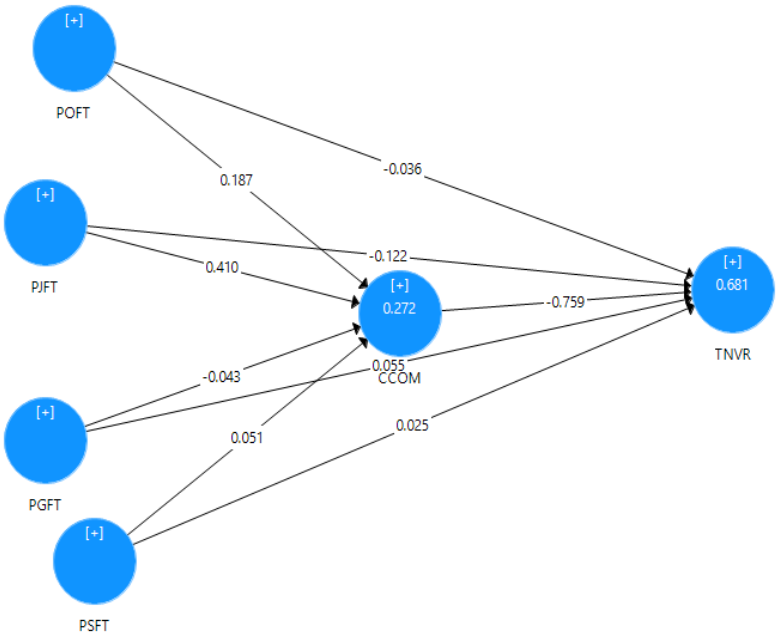

Figure 1. Structural model of the study with the path coefficients and Coefficients of determination

Hypothesis 1(a) *postulated that teachers' person-environment fit dimensions would predict their career commitment*. The result (Table 6, model 2) showed that two dimensions, person-job fit (β=.410, p<.001, f^2=.177), and person-organisation fit (β=.187, p<.001, f^2=.031), significantly predicted career commitment. Person-job fit was the most significant predictor of teachers' career commitment, such that the better congruence a teacher perceived between his/her inner motives and value and career requirements, the more likely he or she would want to remain committed to the teaching profession.

The results regarding hypothesis 1(b) indicated that, among the person-environment fit dimensions, person-group fit (β=.055, p<.05, f^2=.007), and person-job fit (β=-.122, p<.001, f^2=.03) significantly predicted turnover

intentions of senior high school teachers. Person-organisation fit and person-supervisor fit did not predict turnover intentions. A negative relationship was found between person-job fit and turnover intentions. Thus, the more teachers perceived congruence between their inner drives and their role and duties as teachers, the less likely they would be thinking of leaving the classroom. Person-group fit however, had a positive relationship with turnover intention. The effect though statistically significant, was very weak, with negligible effect size. This means that person-job fit is the most critical dimension of the person-environment fit measure in teacher retention in Ghana.

Hypothesis 2: *Career commitment will predict turnover intentions,* was also supported by the results. Teachers' career commitment related negatively with their turnover intentions (β=-.759, $p<.001$, f^2=.266). This is a strong negative relationship, with a moderate effect size. This result means that teachers' level of career commitment is a vital determinant of intentions to stay or leave.

The first two hypotheses described above indicated that some dimensions of person-environment fit significantly predicted both career commitment and turnover intention. Career commitment has also been found to have a strong negative relationship with turnover intentions. Thus, both career commitment and some dimensions of person-environment fit predicted turnover intentions, with career commitment being a far stronger predictor than person-environment fit. This suggests career commitment is a more proximal determinant than PE fit, suggesting a mediating effect of career commitment in the person-environment fit and turnover intentions relationship.

Hypothesis 3: *Career commitment will mediate the relationships between person-environment fit dimensions and turnover intentions was* accordingly tested. The results showed that career commitment partially mediated the effect of person-job fit on turnover intentions (β=-.311, $p<.001$, VAF=.72). The Variance Accounted for (VAF) of the indirect effect of .72 indicated a strong complementary partial mediation effect of career commitment. The results also showed a full mediating effect of career commitment in the relationship between person-organisation fit and turnover intentions (β=-.142, $p<.001$, VAF=.80). This means that, though person-organisation fit did not significantly predict turnover intentions directly, it can do so through career commitment.

Table 6. Path coefficients of Person-Environment fit, career commitment and turn over intentions

Paths	Direct	Indirect	Total	f^2	R^2	Q^2
CCOM -> TNVR	-.759***		-.759***	.266		
PGFT -> CCOM -> TNVR	.055*	.032	.087*	.007		
PJFT -> CCOM -> TNVR	-.122***	-.311***	-.433***	.030	.681	.237
POFT -> CCOM -> TNVR	-.036	-.142***	-.178***	.002		
PSFT -> CCOM -> TNVR	.025	-.039	-.014	.002		
PGFT -> CCOM	-.043		-.043	.002		
PJFT -> CCOM	.410***		.410***	.177	.272	.100
POFT -> CCOM	.187***		.187***	.031		
PSFT -> CCOM	.051		.051	.003		

Note: CCOM= Career commitment; TNVR = Turnover intention; PGFT = Person-group fit; PJFT = Person-job fit; PSFT = Person-supervisor fit; POFT = Person-organisation fit

Discussion

Thinking of quitting a profession is the most probable outcome of job dissatisfaction and indication of lack of career commitment (Zahra, Irum, Mir, & Chishti, 2013). High school teachers' turnover has been noted in many countries during the past two decades (Buckly, Schneider, & Shang, 2000). Research suggests that, countries confronted with persistent teacher shortages also face high rates of teacher turnover (UIS, 2013). Ngimbudzi (2009) for instance, reported that majority of the teachers in his study were intending to quit teaching and change their profession or move to well-paying schools, and Pitsoe and Machaisa (2012) observed that it is the best and brightest teachers who are the first to leave. As aptly suggested by Mulkeen and Nuala (2010), there is the need to plan for teacher supply and their retention, and this requires an understanding of critical antecedents of teachers' turnover and commitment to the profession.

In the current study, the results suggest that, the more teachers perceived congruence between their inner drives, role and duties as teachers, the less likely they would be thinking of leaving the classroom. Person-job fit was the most critical dimension of the person-environment fit measure in teacher retention in Ghana. The result of this study gives credence vividly to earlier empirical report with regards to the importance of the match between a person's characteristics and tasks that are performed at work (Lee, Reiche, & Song, 2010). It further

corroborates the match of teachers' knowledge, skills and ability with the requirements of their job and their needs, desire and preferences with the job itself (Kristof-Brown, Zimmerman, & Johnson, 2005). The current findings indicate that indeed, good congruence of the personal values and beliefs of the senior high school teachers with their work environment (job roles, supervisors, colleagues and organisation norms) suggests greater desire to remain in the profession and not too concerned about conceivable career changes as noted by Behery (2009). Good congruence signals good experience of career satisfaction (Ehrhart & Makransky, 2007), since they fit well with their work environment (Gregory, Albritton, & Osmonbekov, 2010), hence less likelihood of quitting. Again, a good person-job fit also signals better performance on their jobs (June & Rosli, 2011) leading to a feeling of work meaningfulness and greater desire to remain committed to the teaching career.

The second hypothesis: "*Career commitment will predict turnover intentions",* was supported by the results, with a strong negative relationship, and a moderate effect size. This result provided an impression that teachers' level of career commitment is a vital determinant of intentions to stay or leave. Teachers in this study reported a moderate level of commitment to their profession. The results indicated that higher commitment predicts less intention to quit. This is intuitively and logically consistent, and supports other findings in other organisational settings in literature. Committed employees who demonstrate good working attitude are more likely to identify with achievement of organisational goals and uphold good rapport with associates (Robbins, 2001). This sense of identification with organisational values, norms and goals make such employees have a sense of belonging to the institution, and so less likely to contemplate leaving.

The teachers' moderate level of commitment, as well as turnover intentions could be attributed to their demonstrable devotion as members of the educational sector and their support for the educational vision of MoE and GES (Paragsa, 2014). Teachers at the senior high school level of education in Ghana are mostly first degree holders in Education. This suggests that they have trained to become professional teachers, and until certain circumstances compel them, they would want to remain in the teaching profession.

Even though reports suggest that teacher retention is a challenge in Ghana (Cobbold, 2007; 2010) as a result of poor pay, unattractive conditions of

service, change of profession among others (GES, 2012), our study results do not give credence to this earlier assertion. We are of the view that, stakeholder interventions in Ghana enhance the work experiences of teachers (Sam et al., 2014) which eventually reduce the likelihood of teachers' intentions to leave or actual turnover (Wheeler, Gallagher, Brouer, & Sablynski, 2007). It is deemed that career commitment and organisational commitment to the work-related outcomes have significant influence on commitment (Carson, Carson, Roe, Birkenmeier, & Phillips, 1999).

The findings also supported the third hypothesis which tested the mediating role of career commitment in the relationship between person-environment fit and turnover intentions. The current study showed that career commitment partially mediated the effect of person-job fit on turnover intentions. Thus, person-job fit had both direct and indirect effect on turnover intentions of senior high school teachers in Ghana. This means that person-job fit influences career commitment, which in turn, influences turnover intentions of the teachers. It has been recognised that employees with a strong degree of career commitment may invest considerably in their careers (Aryee & Tan, 1992), hence less likely to quit their career. The level of career commitment in this study was also significantly influenced by person-job fit. As observed by Day and Allen (2004), career commitment of employees is positively related to career satisfaction which could come from the congruence between the inner values of the employees and their career (Kaur, Sahi, & Mahajan, 2014; Kristof-Brown, Zimmerman, & Johnson, 2005), and the commitment in turn predicts intention to quit (Fiorito, Bozeman, Young, & Meurs, 2007). Thus, the finding in the current study is consistent with individual direct relationships established in the literature. The test of mediating role of commitment in this study has never been tested in the literature. This finding shows how person-job fit influences turnover intentions, through career commitment.

From the foregoing the researchers emphasise the assumption that undergird the study that: *"The extent to which people fit their work environments has significant consequences for their job outcomes (e.g., career commitment, turnover intentions, satisfaction, performance, stress, productivity), with better fit associated with better outcomes".*

Conclusions

Person-environment fit, (especially, person job fit) is a critical factor in career commitment and turnover intentions, while career commitment strongly influences turnover intentions. Regarding career commitment and turnover intention, it can be concluded that the higher a teacher's level of career commitment, the less likely he/she will nurture the intentions to leave/quit teaching.

Among the person-environment fit dimensions, better person-job fit predicted less turnover intentions. This implies that once teachers found congruence between their personal characteristics and job characteristics, they have little plans to leave teaching. Such persons are likely to stay in the teaching profession for a long time. Teachers were found to be highly committed to their profession when there is congruence between their personal characteristics and that of teaching, and also their personal characteristics and that of the school. Career commitment was found to be complementary to person-job fit on turnover intention, but fully mediated the effect of person-organisation fit on turnover intentions.

Recommendations and implications for policy and practice

The findings of the current study have important implications for policy and practice in the educational sector and other organisations. To begin with, given that person-environment fit, especially the person-job fit dimension was found to be critical in both career commitment and turnover intention, we recommend that admission of prospective candidates into teacher training institutions should include the use of psychological assessment to select candidates with better fit and high inclination to stay in teaching. Therefore, personal values, philosophies and other relevant characteristics should be considered in addition to academic potentials to ensure individuals who fit better into the school environment go into teaching. Individuals who desire to take teaching as a career should be encouraged to do so. Teaching should not be considered or entered into as "an avenue when all avenues fail".

Also, once teachers are in the field practicing, their competences should be developed and improved through appropriate continuous professional development, workshops and in-service training programmes to equip them to

be technically competent. When the teachers are abreast with new developments in their areas of specialisation and also competent in educational delivery, they would be more likely to stay in the teaching profession. These could be done in addition to the Ghana Education Service/Ministry of Education teacher-focused/oriented policies and the provision of incentives to motivate individuals to enter and stay in teaching.

Furthermore, it is important that careers education be made part of the current education curriculum and should be introduced from the basic level of education to the secondary school level. School Counsellors/Psychologists should equip themselves with career information and counselling skills, especially in career development, career guidance, and career choice. Career days, excursions and symposia should be organised for students to help them to know what various careers entail to help them make informed career decisions.

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