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**FEATURE**

**Social Capital and Compensation Package as  
Predictors of Teacher Retention in Rwanda**

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**Abstract.** *Teacher retention has been identified as one of the global problems in the system of education. The problem of teacher retention is taken lightly in Rwanda, yet it affects students' learning. This study investigated the influence of social capital and compensation package on teacher retention in two public secondary schools in two districts in the capital city of Rwanda. This correlational study used an adapted survey instrument on a sample of 409 teachers. Descriptive statistics, independent t-test, analysis of variances, correlation, and hierarchical multiple regression were used to answer the research questions. This study revealed a positive relationship between social capital and compensation package, and teacher retention variables. Compensation package was found to be the best predictor of teacher retention in the capital city of Rwanda. This study concludes with the recommendations to policy makers and school administrators for enhancing the benefits and compensation package of teachers in Rwanda and to future researchers for investigating other factors that contribute to teacher retention.*

**Keywords:** teacher retention, compensation package, social capital, public secondary schools, Rwanda

**Introduction**

Globalization has increased competition in all working sectors, including education. The objective of students is to accumulate knowledge and skills that would help them remain competitive in the workplace (MacLeod & Urquiola, 2009). Teachers play an important role in helping students accomplish that objective. For this reason, effective teachers should be retained in schools.

Effective teachers are the main support that a school can rely on to meet its goals (Oke, Ajagbe, Ogbari, & Adeyeye, 2016). Such goals include ensuring that students learning is accomplished. Correspondingly, teachers are under pressure to increase the achievement of students in order to meet the requirements of the 21st century (Chu, 2014). To achieve this goal, schools need teachers who are stable, qualified, and committed to their work. Such teachers play a significant role in the lives of the students (Yost, 2006). Further, teachers are the ones who translate “educational philosophy into knowledge and skills and transfer them to the students in the classroom” (Ofoegbu, 2004, p. 12). Thus, teachers are very important stakeholders in the school system.

Research has shown that there is a strong positive relationship between teacher retention and student achievement (Allensworth, Ponisciak, & Mazzeo, 2009; Ronfeldt, Loeb, & Wyckoff, 2013). The main purpose of schools is to help students learn (Fielding, Kerr, & Rosier, 2007). Therefore, teacher retention helps to accomplish the school’s mission (Ronfeldt et al., 2013). However, it is shown that the number of teachers who move out of their profession is increasing (Tippens, & Ricketts, 2013).

Studies show that increasingly teachers move from their profession to other careers (Ingersoll, 2001). However, the school administrators cannot always determine the intentions behind the decisions of this teacher movement (Jacob, Vidyarthi, & Carroll, 2012; Worth et al., 2017). Thus, the problem is to know what causes qualified teachers to leave their institutions intentionally and also why some decide to stay. Several studies have been conducted on factors such as working conditions (Ashiedu & Scott-Ladd, 2012; Buchanan, 2012; Cooper & Alvarado, 2006; Gwarino, Santibanez, Daley, & Brewer, 2004; Oke et al., 2016; Tippens & Ricketts, 2013; Winn, 2006), salary (Buchanan, 2012; Buckley et al., 2004; Walker, 2010), and organizational climate (Appel-Drazin, 2016) that independently predict teacher retention. Yet, there is a need for studies on factors that affect teacher retention more holistically.

Further, a thematic analysis of 20 peer-reviewed articles on teacher retention in Australia generated a model of teacher retention (Mason & Matas, 2015). This model included human capital, social capital, structural capital, and positive psychological capital as factors that affect teacher retention. Moreover, Mason and Matas (2015) recommended to test the model. Therefore, this current study fills the gap in literature by testing Mason and Matas’ model and extending the model by adding compensation package, especially in the context of Rwanda.

Considering the issue of teacher retention, this is growing to be a global challenge and a complex phenomenon. It is stated that 25% of all novice teachers around the world leave teaching within four years (Benner, 2000; Rowan, Correnti, & Richard, 2002). Each year between 16 to 20% of teachers in the United States plan to leave their schools (Hanushek, Kain, & Rivkin, 2005). For example, in Chicago public schools, 50% of teachers leave their profession within five years

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(Johnson, Kraft, & Papay, 2012). In the city of New York, more than 25% of experienced teachers and 30% of beginning teachers leave their profession within three years (Miller, 2004). Thus, teacher turnover in the United States leads to the problem of hiring a high number of teachers every year. For this reason, teacher retention in the United States is considered as a national crisis, as it is in Britain (Herbert & Ramsay, 2004). The problem of retaining teachers is also a concern for other developed countries such as Sweden, Germany, and New Zealand (Mckenzie & Santiago, 2005).

Developing countries also face the problem of teacher retention. Xaba (2003) reported that teacher retention is a serious problem in South Africa, Zambia, Gambia, and Malawi. In South Africa, 50% of teachers would leave their profession if they have another profession to go to (Human Sciences Research Council, 2005). For this reason, school leaders in South Africa decided to employ teachers temporarily to fill the vacant teaching posts (Coombe, 2002). The Human Sciences Research Council (2005) also revealed that the problem of teacher retention in African countries is due to inadequate salary, workload stress, the discipline of students, career advancement, and other factors. In Kenya, the problem of teachers who leave teaching is also highly articulated (Waititu, 2013).

Ingersoll (2001) revealed that the turnover rate in teaching is much higher in teaching than in any other profession. This is explained by the fact that in the United States, teachers' turnover rate is 15.7% while other careers count 11%. The problem of teacher retention is also a reality in Rwanda (Monaco, 2016). This global problem of teacher retention raises the desire for researchers to find solutions. This current study attempted to address this issue.

### **Review of Related Literature**

Teachers are the most important professionals that every country should invest in (Lindqvist, Nordänger, & Carlsson, 2014). Consequently, retaining qualified teachers contributes to the quality of education that each school offers (Tehseen & Hadi, 2015). However, studies show that teacher turnover contributes to the uncertainty in teaching (Boe, Bobbitt, Cook, Whitener, & Weber, 1997). Teacher turnover results in the shortage of teachers at some schools resulting to the instability in teaching. In addition, research shows that teacher shortage is much detected in schools where the academic achievement is low and schools with a high level of poverty (Curtis, 2013; Loeb & Darling-Hammond, 2005). This problem, therefore, aroused a desire among researchers to find strategies that will help alleviate teacher exodus—movement from school-to-school and leaving the profession as well. Regardless of the significant progress in many sectors of the world, teacher retention remains the main concern in the educational system (UNESCO, 2015). It is thus critical to investigate the factors that affect teachers' intention to leave or to stay.

### **The Concept of Teacher Retention**

Teacher retention and other concepts that are separately explained later for clarity purposes are discussed in the literature. Employee retention is “a systematic effort to create and foster an environment that encourages employees to remain employed by having policies and practices in place that address their diverse needs” (Sinnott, Madison, & Pataki, 2002, p. 2). Thus, teacher retention is the ability of a school to reduce teacher turnover (Fukofuka, 2014). In addition, teacher retention means keeping and encouraging teachers to remain at the same station for a certain maximum period of time or until their project is completed (Bidisha & Mukulesh, 2013; Mita, Aarti, & Ravneeta, 2014).

Further, other concepts are also explained to clarify teacher retention. Those concepts are teacher turnover and teacher attrition. Turnover is defined as the inverse of retention. Muir (2014) defines teacher retention as the ability to remain while teacher turnover is the ability to leave the school. In other words, teacher turnover is the ability to quit the school to another school or to leave teaching for another profession (Bidisha & Mukulesh, 2013). Relatively, teacher attrition is defined as leaving teaching altogether or to taking another job outside of teaching (Cooper & Alvarado, 2006). Hence, teacher turnover is an umbrella that includes teachers who move within schools and teachers who leave teaching (Lindqvist et al., 2014). Therefore, this mobility of teachers and their feelings to leave their institution contributes to measuring teacher retention.

### **Consequences of Teacher Retention**

Teacher retention is a vital concern in education. Yet, the main concern is not only to keep teachers in their institution but to keep teachers whose skills are valued (Bidisha & Mukulesh, 2013). These teachers are called effective teachers who are characterized by good communication skills, caring, and passionate. These are teachers who are able to teach young students and are competent at the same time (Curtis, 2013). Such teachers offer a valuable contribution to the cohesiveness and effectiveness of the institution (Borman & Dowling, 2008). Keeping quality teachers who are able to affect students’ lives helps school leaders to meet their vision. They also guarantee the meeting of the schools’ needs and withstanding the competition (Fink, 2011).

Teachers are considered as the lifeblood of the school (Kossivi, Xu, & Kalgora, 2016). Referring to the role of skilled teachers in a school, Fink (2011) suggests that teachers’ personality should be tested before hiring them. This test will help school leaders to identify if the teacher will be passionately dedicated to the work. It will also detect if the teacher will help the school to succeed. However, teachers who are committed to work are not easy to find. This is the reason why school leaders should put in place strategies and practices to keep the effective teachers in their schools (Panoch, 2001).

According to Bidisha and Mukulesh (2013), the employee should stay in the organization until he/she feels satisfied with contributing to the direction of the organization. The same study adds that employees should stay until they complete their project. Although it is important to know how many years; a teacher should remain working in the same institution, the number of years to stay at any given institution is not mentioned in many studies. However, Williams (2012) asserts that employee benefits more financially and in skills when he/she stays in the organization for 10 or more years. The reasons for these years are that the employee gets seniority, leadership opportunities, stability to plan for the future, increased benefits, and self-improvement.

Few studies have pointed out the positive side of teacher turnover. According to Macdonald (1999), attrition and healthy turnover result in innovation in schools. The author explains that, not all teachers who leave teaching stay out of the profession. Some teachers quit teaching and over time return to their profession. Research shows that these teachers bring initiatives that enhance teaching in the fullness of time (Lindqvist et al., 2014). Although the above studies show the positive side of teacher turnover, in general, teacher turnover and attrition have a negative effect on the quality of education (Ávalos & Valenzuela, 2016).

The inability to retain teachers in the school influences the school negatively. Research revealed that teacher turnover affects students learning by disturbing the education programs including professional relationships (Borman & Dowling, 2008). Further, it is costly for the school to replace and train new teachers coming into the school (Chen, 2014). The instability of teachers in schools disrupts the implementation of changes in the system of education and affect the culture and the climate of the entire school (Pil & Leana, 2009; Ronfeldt et al., 2013). Therefore, it is recommended for school administrators to keep skilled teachers for the effectiveness of the school.

Teaching is not considered as an attractive profession in different countries. This unattractiveness is explained by the link that is between the socio-economic status of teachers and the reputation of teaching as a profession (Burns & Darling-Hamond, 2014). High teacher attrition is identified in secondary level than other levels. However, in some African countries such as Malawi, Kenya, Zimbabwe and others, teacher retention is a problem in all teaching sectors. This problem causes the “overcrowded classrooms, increased workload, and hiring unqualified teachers” (Symeonidis, 2015, p. 46). Consequently, qualified teachers do not want to teach because of the low pay and /or the work condition.

### **Theoretical Framework**

A theoretical framework stands as a foundation upon which the body of knowledge is constructed (Grant & Osanloo, 2014). Thus, this study is also founded on job embeddedness theory originated by Mitchell and his colleagues in

2001. Job embeddedness is known as “the on-the-job and off-the-job factors associated with individual links, fit, and sacrifice” (Mitchell et al., 2001, pp. 8-9). This definition means that employees stay in the organization because (a) they have a strong link with people in the organization or out of the organization; (b) employees believe that they fit with their job, institution, and the community; (c) Employees also think of what they will lose in case they leave their institution (Young, Stone, Aliaga, & Shuck, 2013). Job embeddedness also highlights that employees in their workplaces compare other jobs with their current jobs. Thus, if the other alternative jobs are better than how they judge their current job, employees leave the institution (Holtom & O’neill, 2004). This theory supports the importance of employees’ attitudes in their decision to stay or leave their institution.

### **Social Capital**

Social capital is seen as a recent concept in the literature. This concept was unknown until the 20th century (Andriani, 2013). It derives its root from the social sciences discipline. It is, however, becoming popular in various fields including education (Adler & Kwon, 2002). The main concern of social capital is that relationships matter. These relationships include a corporation, reciprocity, and mutual trust (Andriani, 2013). Social capital focuses attention on the positive results of sociability and the ways such nonmonetary forms can generate power and influence in the workplace (Portes, 1998). From the above discussion, social capital is seen as a network of relationships between people working or living together that helps them to function effectively.

Social capital has been found to be important in the educational field. It is critical in keeping teachers in their schools. Mason and Matas (2015/ 2016) mention that social capital helps administrator to retain their teachers. The reason is that teachers feel integrated in the school and do not want to lose that connection. Even in public schools, research shows the relationship between social capital and teacher retention. When teachers interact, they prefer to remain within that interaction, and it affects the students’ performance (Pil & Leana, 2009). However, research reveals that the relationship between teachers can have a positive or negative influence on teacher retention (Zajac, 2016). Mason and Matas (2015) give different indicators of social capital in schools. Therefore, relationships among teachers and other people working with them, quality of leadership, and value of teaching will be indicators of social capital for this study.

**Teacher relationships.** It is imperative to mention the role of good relationships in the school. The main reason why employees leave their work is manager-employee relationships. According to Jasper (2007), the school principal and the teacher relationship is “the second most frequent reasons why teaching is quit” (p. 264). This explains the part of the school principal in keeping teachers. It is also proven that significant teacher-teacher relationship, teacher-student

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relationship, and teacher-worker relationship in the school contributes highly to teachers' choice to stay teaching and achieve success (Jasper, 2007; Waddell, 2010). The co-worker's relationship creates self-efficacy, perseverance, a sense of ownership, mutual trust, satisfaction, and engagement which immediately lead to teacher retention (Pitts, Marvel, & Fernandez, 2011).

The other area that is considered to be the most influential in teacher retention is the teacher-community relationship. This relationship includes support from people outside the school. This means parents and the community members surrounding the school. Wood (2013) indicated that support from the community plays a significant role in the decision of teachers to stay or to leave the school. The discussion above concludes that relationships are among the most important factors that predict teacher retention.

**Administrative support.** As it is explained in the preceding section, school leaders are the key players in retaining teachers. The leadership qualities of the school leader contribute much in predicting teacher retention (Mason & Matas, 2016). Leadership is defined as a process in which the employer leads, guides, and influences the employees in order to achieve the organizational goals (Chitra, 2013). In other words, leadership is how the school principals inspire and lead teachers in order to accomplish their tasks. This influence does not mean exercising power over teachers so that they can do the principal's task. It is the principal's actions that influence teachers' work (Voon, Lo, Ngui, & Ayob, 2011).

Arguably, there is a relationship between leadership style and teacher retention. The research found that the presence of stressors is the main reason why employees quit their jobs (Firth, Mellor, Moore, & Loquet, 2004), and leadership style is considered as one of the stressors (Wakabi, 2016). Therefore, leadership styles and teacher retention are highly related (Nair & Malewar, 2013). The formal or informal support from the school administrators makes teachers feel valued and respected. This value creates the intention to stay in the same school (Bettini, Cheyney, Wang, & Leko, 2015). The teachers need emotional, environmental, instructional, and technical support (Hughes, 2012). It has been found that the school principals who have the commitment to contribute to the professional growth of the teachers retain teachers more than they retain others who do not consider it as important (Brown & Wynn, 2009). Thus, administrators' support keeps teachers attached to their schools.

**Value of teaching.** Attitudes of teachers and the community towards teaching affect teacher retention. It is interesting that the values that the schools and community members attach to teaching as a profession contribute in choosing teaching as a career, and remaining in teaching for those who are already engaged (Alkhateeb, 2013; Maslinsky & Ivaniushina, 2016). Research reveals that the reputation of teaching profession from the people in the society affect positively or negatively the attitudes teachers may have toward their work. Therefore, it can determine whether they leave or stay in teaching (Inman & Marlow, 2004). In

some countries, the social devaluation makes teaching as a door for other professions (Gomes & Palazzo, 2017). Thus, those who teach always look for better jobs outside of teaching. Gomes and Palazzo (2017) indicated that the social prestige and the way the society recognize teachers' work affect their intention to stay or leave. Therefore, the social perception of teaching as a profession affects teacher retention.

### **Compensation Package**

Compensation is explained as “the human resource management function that deals with every type of reward individual receive in exchange for performing organizational tasks” (Pepra-Mensah, Adjei, & Agyei, 2017, p. 3). Compensation can create positive or negative outcomes in the organization. On the one hand, the employees who are happy with their compensation work hard with determination and dedication and develop loyalty and commitment to their organization (Khan et al., 2017). On the other hand, this pay can create emotional dissatisfaction if it is not fairly administered. If employees believe that they are poorly compensated, they develop absenteeism, job dissatisfaction, and turnover, among other things (Pepra-Mensah et al., 2017). Thus, leaders of organizations should set up compensation management that encourages employees to remain with their organizations.

Moreover, it is understood that compensation is an essential factor that attracts and keeps skilled employees in the organization. Hence, this factor has called for a lot of attention in research and findings show a strong relationship between compensation and employee retention (Gardner, Van Dyne, & Pierce, 2004; Hytter, 2007; Kossivi et al., 2016; Moncarz, Zhao, & Kay, 2009). However, other findings do not show an immediate influence of compensation on employees' decision to remain with their organization (Gerritsen, Kuijpers, & Vander Steeg, 2015; Hough, 2012). These mentioned studies did not ignore the relationship between salary and other related factors on employee retention; yet, they recommend that compensation should be combined with other factors to increase employee retention rates (Hayes et al., 2006). Compensation in this study is measured in terms of salary, benefits, and recognition.

**Salary.** Salary is defined as “the fixed or guaranteed regular monthly or annual gross payment made to employees for the work accomplished” (Adeniji & Osibanjo, 2012, p. 33). The influence of salary on the success of the organization must not be underestimated; it holds some significant positivity. Research findings are that teachers' exodus is usually directed towards districts that offer higher salaries. This mobility implies that salary is one of the factors that lead to teacher attrition (Imazeki, 2005). However, many researchers have discussed financial implications as motivators; yet, there is no consensus that salary or other financial influences can motivate teachers (Nyakundi, 2012).



Other studies reveal that teachers' high salaries do not have any effect on their retention (Gerritsen, Kuijpers, & van der Steeg, 2015; Hough, 2012). Dee and Goldhaber (2017) also reveal that even though in some studies salary matters less than working conditions to keep teachers in the classroom, the average of studies shows the importance of salary in teachers' decision to remain in their profession. Research recommends that teachers' salaries should be comparable to salaries of other workers. This recommendation results from the fact that teachers are more likely to leave their profession when the salary is low and wage opportunities are less (Akhtar et al., 2016; Chepchumba & Kimutai, 2017; Darling-Hammond, 2003).

**Benefits.** Benefits are defined as “supplementary compensation awarded to workers apart from the basic salary as a result of some certain circumstances” (Salisu, Chinyio, & Suresh, 2015, p. 283). In other words, employees' benefits are considered as the total rewards package. These benefits can be monetary (allowances) or non-monetary depending on the financial capabilities of the organization (Doyle, 2011). These benefits include health insurance, retirement benefits, seniority pay, transportation for events, free meals, among others (Salisu et al., 2015). In any given organization, when the health insurance or benefits are taken into consideration, employees enjoy the working environment. Thus, they feel committed, engaged, and valued (Chege, 2016). Furthermore, retirement benefits are one of the most important benefits that keep employees in the organization (Otieno, 2010). Chege (2016) asserts that an organization that has a retirement scheme or agreement retain talented employees. Thus, organizational leaders need to provide benefits to employees in order to increase the retention of their employees (Haider et al., 2015; Salisu et al., 2015).

**Recognition.** Recognition is considered as “the acknowledgment of an individual or team's behavior, effort, and accomplishments that support the organization's goals and values” (HR Council of Canada, as cited in Mngomezulu, Challenor, Munapo, Mashau, & Chikandiwa, 2015, p. 372). Further, recognition has been discussed as part of non -financial compensation. Recognition might be a useful strategy for maintaining teachers in the educational sector (Aktar, Uddin, & Sachu, 2013). It may be assumed that managers of schools would effectively be able to retain their best employees if they are informed of those factors affecting the employees' satisfaction. Thus, research reveals that rewards help the employers to maintain the qualified employees. The next section presents the research questions:

### Research Questions

This study answered the following research questions:

1. What is the demographic profile of public secondary school teachers in Rwanda?
2. Is there a significant difference among the categories of demographic variables (gender, age, educational level, and years of experience) in terms of social capital, compensation package, and teacher retention in Rwanda?
3. Is there a significant relationship between the variables, social capital and compensation package, on teacher retention in Rwanda?
4. What is the best predictive model of teacher retention considering the independent variables of this study after adjusting for the demographic variables.

### Methodology

This study is quantitative in the sense that numerical data was analyzed from a preset questionnaire (Creswell, 2012). Further, this research follows the positivistic philosophy. The study is a correlational study because it focuses on “the existence of a relationship/association/interdependence between two or more aspects of a situation” (Kumar, 2005, p. 10). This study utilized the relationship of selected variables.

The population of this study was 994 teachers from the public secondary schools’ teachers in the capital city of Rwanda. The sample size for this study was calculated following the formula given by Thompson (2012):

$$n = \frac{P(1-P)N}{\frac{(N-1)e^2}{Z_c^2} + P(1-P)}$$

Therefore, 411 teachers were identified to be part of this study. The proportionate stratified sampling was used to decide the sample in each district and convenience sampling to select schools and teachers for this study. A pilot study was conducted to establish the validity and reliability of the questionnaire. Clearance to collect data was obtained from the ethics review board of the researchers’ educational institution. Additionally, ethical considerations were followed for data collection.

After data cleaning and testing for regression assumptions, the validity of the 83-item instrument was checked through representational validity by seven experts, and face validity by four teachers from the target population. An exploratory factor analysis was also conducted that reduced the items of the questionnaire to 77.

A reliability analysis of the adapted instrument showed a cronbach alpha of .92 for social capital, .84 for compensation package, and .87 for teacher retention showing that the instrument was reliable.

Questionnaires were distributed to public secondary school teachers from the two districts of Kigali City. The final number of respondents who returned the questionnaire was 409 which is a 77.5% return rate. Data was prepared for analysis using the SPSS.

The first research question involved descriptive statistics. The second research question required the use of the *t*-tests and analysis of variances to check the significant differences for each independent variable in terms of gender, age, educational level, and years of experience. The third question was answered by correlational analysis to investigate the relationship between variables. For the fourth question, hierarchal multiple regression analysis helped to determine the best predictive model for teacher retention.

### **Results and Discussion**

This section presents the major findings from this study. Literature supporting the findings is also detailed. Data cleaning reduced the final respondents from 409 to 398. Below is the presentation of results and discussion for each research question.

#### **Research Question 1**

The first research question probed the demographic variables of the respondents.

The results were obtained by carrying out a descriptive analysis and checking the frequencies and the percentages for each demographic variable. The findings are presented according to teachers' gender, age, educational level, and years of experience. Table 1 shows the results for the first research question. The majority of these respondents are male, aged between 31 and 40 years, hold a bachelor's degree, and have 0 to 5 years of working experience.

The difference in gender distribution (53.9% males compared to 46.1% females) in secondary schools may be due to several reasons. As Symeibudis (2015) explained, a large number of female teachers prefer to teach in early childhood or at primary level whereas male teachers are interested in teaching secondary, vocational and higher education. In Rwanda, since 2001, both males and females have the same access to education. A gradual closing of the gender gap is visible with both genders having chance to obtain degrees required for teaching at this level (USAID/Rwanda, 2014).

Table 1  
Demographic Profile of the Respondents

	Frequency	Percent	Cumulative Percent
<i>Gender</i>			
Male	212	53.9	53.9
Female	181	46.1	100.0
<i>Age</i>			
20 - 30	113	28.8	29.0
31 - 40	205	52.2	81.7
41 & above	71	18.1	100.0
<i>Educational level</i>			
High school	22	5.6	5.6
Bachelor	350	89.1	94.7
Post Bachelor	21	5.3	100.0
<i>Years of experience</i>			
0 to 5	173	44.0	44.0
6 to 10	171	43.5	87.5
11 & above	49	12.5	100.0

Regarding the findings on age, the majority of college students graduate between 20 and 30 years of age (Ministry of Education, 2016). However, these graduates are seen job hunting in other professions. They typically choose teaching profession eventually as they need to settle down with family responsibilities (Luekens, Lyter, Fox, & Chandler, 2004). This observation may be the reason why the majority of secondary school teachers fall in the category of 31 to 40 years of age.

About educational level and years of experience, bachelor's degree is a qualifier to teach in secondary schools (Ministry of Education, Science, Technology, and Scientific Research, 2003). Hence the study reflects the bachelor's degree holders as the most in number. With regard to years of experience, since teaching is generally not considered as the first option as a profession in Rwanda, teachers leaving the job is a common phenomenon; teaching also opens doors to other more lucrative jobs (Cooper & Alvarado, 2006). These reasons may explain the reason why fewer teachers are found in the category of beyond 10 years of experience.

### Research Question 2

The second research question dealt with the difference among demographic variables in terms of social capital, compensation package, and teacher retention. The study revealed a significant difference when the  $p$  value is lesser than .05. For gender, the  $p$  value for social capital is .459, compensation package ( $p = .753$ ), and teacher retention ( $p = .792$ ) do not differ significantly between male and female. Considering the age, there is no significant difference in social capital ( $p = .334$ ) and teacher retention ( $p = .068$ ) among the categories of age. However, these categories differ significantly in terms of compensation ( $p = .022$ ). This means that teachers between 41 years old and above consider compensation package more important than teachers between 31 and 40 years old. In terms of educational levels, there is no significant difference in social capital ( $p = .653$ ), compensation package ( $p = .651$ ), and teacher retention ( $p = .470$ ). At last, social capital ( $p = .232$ ), compensation package ( $p = .473$ ), and teacher retention ( $p = .281$ ) do not differ significantly among the categories of years of work experience. Thus the null hypothesis, there is no significant difference among the categories of demographic variables in terms of social capital, compensation package, and teacher retention was rejected.

The findings of this study on compensation package contradicts with literature. The results point that male and female have equal perceptions of compensation package. Such findings may depend on the context where the study was conducted but generally, male are more demanding in terms of salary and related benefits than females (Mehrotra & Khandelwal, 2015). In addition, Chirchir (2016) revealed that employees' perceptions of recognition and pay increase with age. The conclusion is that as employees grow in age, they like to be recognized in public than those who are young. Further, literature revealed that daily social interaction in the workplace does not differ significantly because of age (McDonald & Mair, 2010) and that agrees with the findings from this study. Building connections between teachers do not depend on the level of education, yet, it is the ability of teachers to build the relationship that increase social capital (Imandoust, 2011). Furthermore, for schools where turnover rate is high, age does not matter for teachers to make a decision to leave or remain with the school (Lindqvist, 2014).

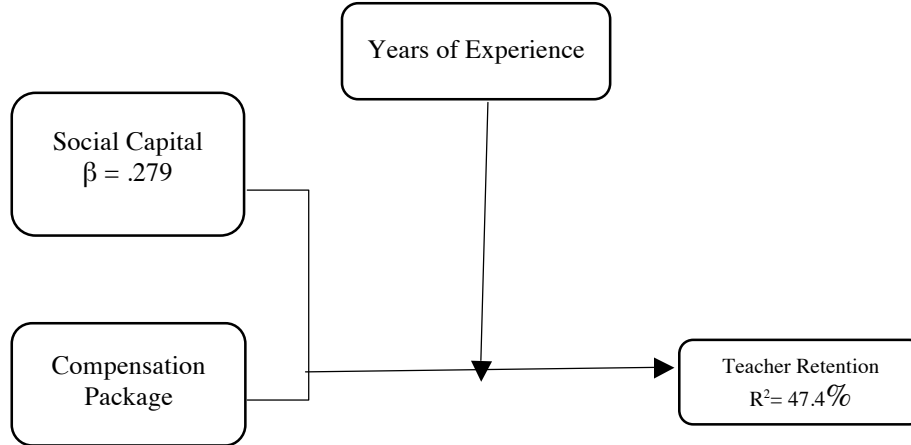
### Research Question 3

The third research question addressed the issue of relationship between social capital and compensation package, and teacher retention. The findings show that there is a strong positive relationship between social capital and compensation package ( $r = .609^{**}$ ,  $n = 393$ ,  $p < .01$ ). Social capital is strongly related to teacher retention with  $r = .573^{**}$ ,  $n = 393$ ,  $p < .01$ . Compensation package is also positively related to teacher retention ( $r = .652^{**}$ ,  $n = 393$ ,  $p < .01$ ). Consequently, the null hypothesis was rejected implying that there is significant relationship between independent variables and the dependent variable.

Literature revealed that when employees have good relationships among themselves or between them and other workers in the same institution, they develop confidence in doing their work (Raza et al., 2011). Further, the knowledge learned from social connection keeps employees in the institution (Part, 2003). It is also stated that the employees who are less paid are likely to leave their institutions (Akhtar et al., 2016).

#### Research Question 4

The fourth research question probed the existence of a predictive model for teacher retention. The results show that the demographic variables contribute 1.9% to teacher retention. However, this contribution is not significant ( $p = .189$ ). The second model predicts teacher retention 48.3% (R square). However, when the effect of years of experience is removed the contribution becomes 42.4% (R square change). The coefficients show the contribution of each variable: social capital ( $\beta = .279$ ,  $p = .000$ ) and compensation package ( $\beta = .481$ ,  $p = .000$ ). Therefore, compensation package that includes salary, benefits and recognition is the best predictor of teacher retention for this study. The model is represented as an equation as follows: Teacher retention =  $.481 \times$  compensation package +  $.279 \times$  social capital +  $.026 \times$  years of experience. Figure 7 shows the best predictive model for this study.



Literature supports the findings of this study. Teachers who have built good relationships with the school administrators, teachers, students, and parents do not like to lose that connection; therefore, they stay in the school (Pitts et al., 2011). Further, as it is shown in the model, compensation package is the best predictor of teacher retention. Furthermore, the respondents scored items of salary and benefit low, which means teachers in the capital city of Rwanda are not satisfied with the

salary and benefits they get. Therefore, the payment should be compared to the work performed (Osibanjo et al., 2014). If not, teachers may consider moving to other institutions where they can receive high salary and benefits. To this, Abdullah et al. (2016) added that school administrators who recognize the work of their teachers and pay them accordingly have high teacher retention rate.

### **Conclusion and Recommendations**

The majority of teachers in the public secondary schools located in the capital city of Rwanda are male, between 31 and 40 years old, hold a bachelor's degree, and have 0 to 5 years of working experience. Further, this study showed that there is no significant difference in social capital, compensation package, and teacher retention among the categories of gender, age, educational level, and years of experience. Yet, a small effect size has been identified in compensation package among categories of age.

This study also revealed that there is a positive relationship between social capital, compensation package, and teacher retention. Thus, social capital and compensation package predicts significantly teacher retention and compensation package was found to be the best predictor of teacher retention in the public secondary schools in the capital city of Rwanda. From the findings of this study, recommendations to the educational stakeholders and to the future researchers are provided. The following section is organized according to each category that will benefit from the current study.

### **Educational Stakeholders**

Based on the respondent's answers related to compensation package, the government of Rwanda may increase salary of public-school teachers. Lower compensation package was identified as the reason for teacher turnover. This instability of teachers in a given school may reduce the quality of education that schools offer. The government of Rwanda may also educate the community to value teaching as a profession. Teachers revealed that teaching in the Rwandan community is not as valuable as other professions. Further, it is recommended to the school principals to attract teachers by providing more benefits. It is also required by teachers to continue their best practices. Furthermore, the school principals may practice the best strategies to reduce the number of teachers who quit the school such as encouraging working environment that promotes good relationships between teachers, administrators, students, and parents.

### Future Researchers

As the model in this study explains 47.4 % in teacher retention, future researchers may have insights from this study on the areas of investigation. Further studies are required to investigate other factors that contribute to teacher retention in the capital city of Rwanda. The same study can also be replicated in other countries, including developed countries to investigate the factors that influence teacher retention. Further, it would be of importance to conduct the same study in rural settings and compare the findings. Future researchers may also conduct this study in faith-based schools and check if the conclusions will be the same. Furthermore, Structural Equation Modeling or a qualitative methodology can be used to understand deeply the reason why teachers leave their schools.

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