

Rwanda Journal ISSN 2305-2678 (Print); ISSN 2305-5944 (Online)

DOI: <http://dx.doi.org/10.4314/rj.v4i1.5B>

Repercussions of the intrinsic motivation on the determinants relating to the retention of the personnel in the Public Institutions of higher education in Rwanda

Etienne Serupia Semuhoza , University of Rwanda

Summary

This research, realized within the public education institutions, is interested in the implications of the intrinsic motivation, in the meaning of the self-determination theory of Déci and Ryan (1985), on a rough satisfaction on work and an affective organizational commitment which constitutes determining factors for the retention of the employees.

Multiple linear regression analyses show that the intrinsic motivation presents significant linear associations with respect to emotional organizational commitment and the job satisfaction and that association is stronger with this latter. With regard to the moderating effects, they prove to be not-significant.

On the other hand, the perceived organizational support holds a direct and significant influence on emotional organizational commitment, just as the style of the transformational leadership of the direct or immediate supervisor towards emotional organizational commitment is stronger than that between the intrinsic motivation.

Key words: Motivation, Satisfaction, Implication, organizational commitment, transformational Leadership.

1. Introduction

The retention of the personnel is a significant problem for the organizations of today considering the changes of the environment at the level of economic, technological, demographic, social and political dimensions.

With an aim of exploring the underlying factors with the employees keeping into service in the colleges of higher education, from 2013 to date, I started to carry out a survey on Motivation of personnel compared to their satisfaction, with regard to various aspects of their work, their level of commitment towards the organization, the work impact on their personal and family life, and their intentions of university career (the questionnaire on the employees keeping into service of the academic and administrative personnel).

The general objective of this study is to explore the implications of the motivation on aspects related to the retention, with an ultimate aim to optimize the strategies of retention of the personnel of the colleges of higher education.

The concept of motivation is even in the centre of the human life; it is closely related to the concept of need, due to the fact that our needs motivate us to behave in a certain way. For example, a thirsty person will be motivated to get something to drink. Thus, the interest of this research is particularly placed on the level of the motivation to work. Indeed, people spend on average a quarter of their adult life at work, taking away the number of hours

intended for the sleep and the domestic tasks. It remains only little of time for the activities of pleasure. It is thus essential to wonder what could support the motivation to work so that the employees can get a deep satisfaction from it.

Moreover, work involves a significant psychological investment for the person; it offers an identity to him/her and determines his/her way of life from a material point of view (Gallerand, 1993).

In current societies, work belongs to the identity of the individuals. For this reason, when we meet somebody for the first time, isn't it why we have tendency to ask him/her, "What is your job"? "What do you do"?

The motivation to work, in particular the intrinsic motivation, is related to positive consequences (Ryan and Deci, 2000). To this end, scientific documentation enables us to affirm that the motivation is closely associated to organizational commitment (Eby et al. 1999; Groulx, 2002; Hunter, 2003), and with effects on the job satisfaction (Eby et al, 1999, Richer et al, 2002).

Furthermore, organizational commitment is an excellent predictor of the intention to remain into service (Mueller et al. 1994, Spector, 1997). The meta- analysis realized by Griffeth, Hom and Gaertner (2000) also identify organizational commitment and the job satisfaction like solids predictors of the intentions to leave. Thus, the literature review makes it possible to establish a close link between the job satisfaction, the organizational commitment and the retention.

This research is used as pilot study to examine the relationship between the motivation and the organizational commitment, as

well as the job satisfaction within the university institutions. It is based on the self-determination theory motivation of Deci and Ryan (1985). Briefly, this conceptualization of the motivation is founded on the concept of self-determination, which represents the level to which the behavior is auto- determined, i.e. the level to which the individual has the feeling that their actions are freely determined by themselves.

This present study will be able to explore the consequences of the intrinsic motivation, which is an individual factor, on various levels, that is to say on the level of the organization (affective organizational commitment), and on the level of the immediate working group (global job satisfaction). This approach allows examination and comparison of the role of the intrinsic motivation on two distinct levels. This research also aims at observing the role of moderating variables which can appear as being resources to influence the impact of the motivation on significant consequences.

The moderating effect of the transformational leadership style of the immediate supervisor, on the relationship between the intrinsic motivation and the global job satisfaction will be studied. In addition, the self-determination theory was seldom applied to the work environment, and school and or academic context, particularly the retention of the personnel. Consequently, this research will be able to enrich the orientation by the interventions aiming at the retention of the academic and administrative staff.

In the light of the documentation which exists today and which is connected to the motivation on work, in bond with affective organizational commitment and the global job satisfaction which

are the actors shown as being of great influence on the intentions to leave, and given the importance of the subject of the retention of the employees, the specific objectives of this research are as follows:

- To explore the consequences of the intrinsic motivation, within the meaning of the self-determination theory of (Deci & Ryan, 1985), on the affective organizational commitment, according to the theory of the three components of Meyer and Allen (1991).
- To explore the consequences of the intrinsic motivation on the global job satisfaction, as defined by Spector (1997) ;
- To examine the moderating role of the organizational support perceived (Eisenberger et al., 1986) between the intrinsic motivation and affective organizational commitment.
- To examine the moderating role of the style of transformational leadership style of the immediate supervisor (Bass, 1985) between the intrinsic motivation and the global job satisfaction.
- To examine whether the intrinsic motivation is more connected to factors of the organizational level (perceived organizational support and affective organizational commitment) or linked to level of the immediate working group (the transformational leadership style of the immediate supervisor and global job satisfaction).

2. Conceptual and theoretical framework

2.1 Self-determination Theory

For the present study, the concept of motivation lies within the scope of the self-determination theory of Deci and Ryan (1985).

This one has expanded during the last three decades in the field of the psychology of motivation. It offers a concrete framework of analysis and application. The self-determination theory is founded on the concept of self-determination, which represents the level to which the behavior is auto-determined, i.e. the level to which the individual has the feeling that their actions are freely determined by themselves.

These theories suggest to consider that the individual's behavior is justified by the need to feel qualified and to be at the origin of their own behavior. This assumption is based on a framework of analysis where three theories are articulated: the cognitive evaluation theory, the orientation to causality theory and that one of the integration of oneself (Deci and Ryan 1985, quoted by Roussel 2001).

The first theory finds that the motivation to work would be caused by the expression of a need for competence, it would lead the individual to try to control their environment (work, employment, organization) in order to develop their feelings of competence and effectiveness. When the individual develops these two feelings, they would tend to be reinforced in the process of motivation to be powerful. The orientation to causality theory states that the individual would seek to control his environment by his own behavior; the motivation would be also caused for the individual

by the will to be the causal agent of his/her own behavior when he/she seeks to satisfy his needs.

Finally, the integration of oneself theory assumes that the various forms of control of the individual in the organization as well as the external constraints contribute to his/her socialization process. They take part in the evolution of their personality. This theory assumes that each individual would change behavior in the organization under the effect of an exteriorization process, so that behavior initially controlled by factors of external control would become auto-determined as time goes by. Thus, the instrumentality could become auto-determined at different levels, according to whether it is integrated into oneself and is assumed by this one, because it is coherent with the image that the individual would have towards him/herself.

According to Roussel (2001), the articulation of these three theories brings Deci and Ryan (1985) to choose a protean vision of the motivation by distinguishing three states which can be classified on a continuum of self-determination:

- The intrinsic motivation characterizes the individuals motivated by competence and self-determination needs;
- the extrinsic motivation characterizes the individuals whose behavior are guided by the motive of instrumental nature, work becoming the mean to reach an end (material well-being);
- The feeling of self-determination decreases according to whether the individual loses the control of the regulation of his/her behavior.

Lastly, the lack of motivation characterizes the individuals who mechanically carry out a work. The individual does not perceive any more the relationship between their efforts, their actions and the results they obtain.

These researches lead Amabile (1993) to suggest a complementary definition to the motivation, in response to the contributions of this theoretical current: "the individuals are intrinsically motivated when they carry out an activity for the pleasure, the interest, the satisfaction of curiosity, the expression of oneself or the personal challenge. The individuals are extrinsically motivated when they have committed themselves into an activity to satisfy an objective apart from the activity itself "- salary, career, living environment.

The theory of Deci and Ryan (1985) introduces three forms of motivations laid out /set on a continuum of self-determination: the amotivation/ lack of motivation, the extrinsic motivation. The amotivation/ lack of motivation is to the pole of the less auto-determined continuum, and the intrinsic motivation is at the end of the auto -determined continuum. The extrinsic motivation, localized in the medium, is divided into four sub-sections: external regulation, introjected regulation, identified regulation and integrated regulation. The empirical verification of the continuum of self-determination was carried out within many studies in various fields (Blais et al, 1990; Vallerand et al, 1992; Pelletier et al, 1995; 1996), of which the field of work (Blais et al., 1993; Hunter, 2003).

2. 2 Intrinsic Motivation

This study concentrates on the intrinsic consequences of the motivation in particular, owing to the fact that this form of

motivation has the most positive repercussions (Ryan & Deci, 2000), inter alia on affective organizational commitment (Eby et al., 1999, Groulx, 2002 ; Hunter, 2003) and job satisfaction (Richer et al. 2002; Eby et al., 1999 ; Deci et al., 1989).

The intrinsic motivation symbolizes the auto-determined motivation and appears at an individual who achieves the tasks for satisfaction and the pleasure that they bring to him. The intrinsic motivation gets pleasure to a professor who chose the career of teaching. When a person undertakes an action by intrinsic motivation, it does not seem to be justified by external reinforcements, but indeed by an internal feeling of rejoicing (Ryan et Deci, 2000).

The cognitive evaluation theory, which is a sub-theory of that of self-determination, seeks to specify the factors which explain variability in the intrinsic motivation can be identified. In the centre of the cognitive evaluation theory, three processes supposed to support the development and the maintenance of the intrinsic motivation are introduced: first of all, the locus of internal causality represents at the individual the perception that his/her actions are determined by their own will.

This process is thus in connection with the need of autonomy. Secondly, the perception of competence, which joined the need of competence, is characterized by the feeling to be qualified during the execution of their tasks, what can be encouraged by a constructive feedback (Déci & Ryan, 1985). Thirdly, the perception of interpersonal affiliation is influenced by the nature of the relations between colleagues, and between workers and

supervisors, either positive or negative. This last process is in connection with the affiliation and commitment needs.

2.3 Organizational commitment

Meyer and Allen carried out several studies related to organizational **commitment**, and gave the following definition to clarify this phenomenon: «organizational **commitment** is a psychological state which characterizes the relation between the employee and the organization and which has implications on the decision to continue or to put an end to this relation "(Meyer and Allen, 1991).

The affective organizational commitment results into an emotional feeling vis-a-vis the organization. This component of commitment refers to a feeling of attachment, identification and of devotion towards the organization» (Meyer and Allen, 1991). An employee who is identified to his work environment, who is dedicated to it, and who is psychologically attached to it, presents an affective organizational commitment. The perceived organizational support can be defined as the level to which the employee perceives the organization like developing his/her contribution and preoccupied with his/her well being (Eisenegger et al, 1986).

This concept is related to the standard of reciprocity and the social theory of exchange, which is the principle by which people in social context carry out exchanges with an aim of maximizing their benefit. If one compares this concept to the organizational context, an employee who has the impression that their employer of support will be inclined to support them in return, for example while being a committed and productive worker.

In other words, the organizational commitment of an individual is influenced by his/her perception of the organizational support of which they experience with their institution. Indeed, in scientific documentation, the perceived organizational support was found many times in relation with the organizational commitment, in particular with the affective form of commitment (Eisenberger et al, 1990; Meyer & Allen, 1997, Rhoades et al, 2001; Eisenberger et al. 2001; Rhoaders & Eisen, 2003).

2.4 Job satisfaction

An attentive reading of the work devoted to the analysis of satisfaction and motivation makes it possible to seize that these two concepts are suitable to be associated to several other variables (Gellerman, 1971; Miskel and Ogawa, 1988, Sandra, 1989, Brunet, Dupont and Lambotte, 1991, Suzanne, Michel and Antoine, 1993, Viau, 1999).

Gellerman (1971) stresses that our knowledge as regards satisfaction of the employees is more advanced than our knowledge as regards motivation and than two realities obviously are confused. In his study on the justifying capacity of the money, he affirms that "the motivation is due to an influence which makes that an individual acts deliberately in another way than that which he could have adopted in the absence of this influence.

This idea is shared by many others in particular by Herzberg who distinguishes hygiene factors from the motivational factors. He defines the satisfaction as a state of equilibrium and not dynamic. Too much dissatisfaction immobilizes an individual in the tension, frustration or the resentment (Herzberg, 1971), but too much satisfaction are able to discourage from acting.

On their side, Foucher (1981), quoted by Brunet, Dupont and Lambotte(1991) in their study of the job satisfaction of the teachers of Quebec, find that satisfaction is made up of a series of specific personal achievements with regard to various elements of the situation to work. The achievements depend on the meeting between the need for the individual and the incentives of the situation of work. Thus, the job satisfaction would be multidimensional, i.e. made up of a set of several feelings with regard to various aspects of work (quoted by Brunet, Dupont and Lambotte , 1991).

Comparing the concept of motivation and that one of satisfaction, Gellerman (1971) finds that "to be motivated" means to direct one's action and to be committed towards the achievement of the objectives. However, the author adds that it is a difficult task for the supervisors to act on the patterns of the subordinates' satisfaction.

Practically speaking, it should be stressed that the author introduces a dynamic aspect in the sense that it binds the concept to the performance of the organization. This "energy dimension" refers to the motivational aspect of the human resource management, i.e. with the release of a latent energy or the activation of a potential.

Werther et al. (1985) define the satisfaction as a difference between what the individual awaits from his work and what they find. It is generally true that it consists of a favorable or unfavorable attitude of an employee with respect to his work. The perception of a satisfaction concerns a quite relative overall assessment. Thus, it depends partly on the climate of the group and

the effects of intra or inter group comparisons depending on the state of the internal relations. This reveals that the concept of satisfaction varies according to the same references and standards' related on the culture and the style of organization: in a system resting on the rules, it will be reached when the procedures are observed, while in a innovating structure it will suggest to show initiative and a large autonomy.

This type of measurement led to an ambivalent situation found in the systems working by objectives (Lemoine, 1998). It brings a well defined framework and an orientation of motivated work by obtaining clear objectives, with intermediate reference marks like guide, but it causes also reserves by the fact that it institutes a routine inspection of the activity, measurements of the activity and generally a overall judgment on the people.

It is in this direction that it was shown that it is not the evaluation itself which increases the motivation but the analysis of the situations which brings a knowledge of the processes and gives reference marks for better managing its action (Lemoine, 1995). The systematic evaluation rather induces relational difficulties and conflicts because of the judgments and the social comparisons that it causes, which involves the dissatisfaction.

The concept of satisfaction refers more to a style developing the personal relations, the support, the confidence granted to the collaborators, and of this fact is not any more the subject of significant research, but remains only used like social thermometer in order to avoid the social conflicts if possible. It is the same for the concept of motivation which become common in spite of a search for integration (Equivocal, 1994), made way for the

implication, while being regarded as an inciting mean to work, influencing or leading the individuals to adopt an attitude or a particular behavior (Dolan, Lamoureux et Gosselin, 1996), i.e. to mobilize.

2.5 Transformational Leadership

The style of leadership of the immediate supervisor obviously has effects on the perception of the subordinates in their work environment (Robbins & Langton, 2001) and on the aspects concerning their job satisfaction. The style of leadership can be defined using the transformational leadership theory introduced by Bass in 1985 (Avolio et al., 1999; Bass, 1990; Bass, 1997; Bycio et al., 1995, Hayter & Bass, 1988; Robbins & Langton, 2001). This one identifies the following dimensions: non-interventionism leadership, transactional leadership and transformational leadership. Only this last type of leadership (transformational leadership) will be retained within the framework of this research.

The transformational leadership, regarded as a new paradigm, interests much the researchers since the years 1980. It is easier to understand what the transformational leadership is when one compares it with the transactional leadership.

Bass (1998) defined four components of transformational leadership:

- **Charismatic Leadership:** transformational leadership acts in order to become a model for their subordinates who are identified with their leader and often try to imitate them. He/she is admired, trusted and one respects the transformational leader who is recognized for his

persistence, his direction of ethics, his extraordinary capacities and his determination and who manages to give to their subordinates a vision able to be reached in a more enviable future: They set objectives which become true challenges shared by all;

- **Inspiring motivation:** the leader acts in order to motivate and impose those who surround him/her providing them a sense of their work and a team spirit results from this;
- **Intellectual stimulation:** the leader stimulates the creativity of his subordinates, supports the innovation and encourages the new ideas;
- **Individual consideration:** the leader treats the whole of his subordinates equitably, but recognizes their individual needs for achievement and realization of oneself. With this intention, he/she acts like a mentor or a coach and accepts the differences of each one.
- However, BASS points out that the executives having a strong need to succeed can be weak motivators because their will to see the work well done , they tend to do it themselves than to motivate the others.

The transformational leaders must wish to have the power, not to be used on their own profit, but to achieve goals from which will profit the whole organization, and to exert a socialized power because it implies the fact of giving capacity to the others, allowing them to share the same values and adhere to the same objectives. This enables them to be autonomous within the framework of a common action.

The following research hypotheses were formulated:

Hypothesis 1 : The intrinsic motivation has a positive influence and significance on the affective organizational commitment. According to Groulx (2002) and Hanter(2003), who examined the link between the various forms of motivation according to the self-determination theory and the affective organizational commitment at the University of Rwanda, the intrinsic motivation has a positive and significant influence on affective organizational commitment.

Hypothesis 2: The intrinsic motivation has a positive and significant influence on the global satisfaction to work. Deci, Connell and Ryan (1989), as well as Richer et al. (2002) and Eby et al. (1999) made the discovery of a positive and significant relation between the intrinsic motivation and the job satisfaction within the framework of their research.

Hypothesis 3 : The perceived organizational support has a moderating effect on the affective organizational commitment, and this effect is positive in accordance with the scientific documentation (Eisenberger et al., 1990 ; Meyer & Allen, 1997 ; Settoon et al., 1996 ; Rhoades et al., 2001 ; Eisenberger et al., 2001; Rhoades & Eisenberger, 2002 ; Fulter et al., 2003), who shows a positive relationship between the perceived organizational support and organizational commitment.

Hypothèse 4 :

The style of transformational leadership of the immediate supervisor has a moderating effect on the force of a linear association between the intrinsic motivation and the global job satisfaction, and this effect is positive. On the level of immediate

working group, Deci and Ryan (1985) assume that the supervisor plays a prominent role so that the motivation can result in a job satisfaction, that is to say the auto determined motivation is not disadvantaged by a too rigid supervision which would prevent the development of feelings of autonomy and competence. Moreover, Deci, Connell and Ryan (1989) concluded that the leadership style which facilitated the self-determination was favorable for the job satisfaction. The leadership transformational style is compatible with this type of approach.

Hypothesis 5 :

The intrinsic motivation explains the variations of affective organizational commitment as well as the variations of the global job satisfaction. Considering the type of organization which are the employees of the university of Rwanda, i.e. considering the academic culture, the hierarchical structure of the organization, and which involves every time a change of immediate working group, one can premise that the motivation of the individuals more influences their attitudes towards the organization as well as their attitudes towards the immediate work environment.

3. Methodology

According to the official data recent and available at the moment of the investigation, the total number of the academic and administrative personnel at the university of Rwanda (N= 960) and at the Institute of Sciences and Technology of Kigali (N= 373) the total was 1333. This number being too high, we proceeded to a reasoned choice of the guarantors according to their presence in their services. The methods by reasoned choice is based on the judgment (Thietart, 2007), and is different from the probabilistic

methods from which the objective precisely consists in eliminating this subjectivity.

The questionnaire, as it was prepared and distributed within the framework of this study is appended.

All the concepts are evaluated using measuring instruments that have psychometric properties established beforehand. For each measuring instrument, the internal consistency will be reported using « alpha de Cronbach ». This one will be compared with the minimum standard of 0.70 Nunnally (1978) for an exploratory research. The whole of the concepts are evaluated by scales of the type Likert at five degrees. All the scales, except that one which measures the transformational leadership style of the immediate supervisor, requires the guarantor to indicate to which point they agrees with the statements, by using a scale from one (Strongly Disagree) to (Strongly agree).

With regard to the measuring instrument of the leadership style of the immediate supervisor, the participant should indicate the frequency to which the supervisor carries out the behaviors described in the statements, by using a scale from zero (Never) to four (Very often/Always). This measuring instrument was selected in conformity with the broad range of research which is more and more based on the three components theory of Meyer and Allen (Meyer & Allen, 1997) to examine organizational commitment.

Moreover, the preceding studies carried out within the public services that observed affective organizational commitment used this measuring instrument (Dobrev, Martinova, 2002; Groulx, 2002; Hunter, 2003). A certain number of questions refer to the indicators of the scale of affective organizational commitment.

This one shows a coefficient alpha of 0.87(Allen&Meyer, 1990), which is higher than the minimum standard.

The perceived organisational support is measured by the version shortened of Perceived Orgazational Support Questionnaire of Eisenberger et al. (1986).

This measuring instrument was privileged since Eisenberger et al.. developed the concept of the perceived organizational support, and they are the only ones to offer indicators to evaluate it. Also, the shortened version was used before within comparable studies in the public services (Dobрева-Martinova, 2002).

This measuring instrument contains sixteen items measuring the perception of the individuals vis-a-vis the organizational support of which they make the experiment The coefficient alpha reported for this scale is 0.97 (Eisenberger et al. 1986, 1990), what is definitely higher than the minimum standard of 0.70 (Nunnally, 1978).

The scale used to measure the job satisfaction comes from the measuring instrument Job Satisfaction Survey of Spector (1997). This scale makes it possible to measure nine facets of the job satisfaction (salaries, promotion, supervision, benefit, recognition, working conditions, colleagues, nature of work and degree of communication in the organization), and their combination allows to obtain a total score of the job satisfaction.

Indeed, the total score of the job satisfaction is retained within the framework of this study, and this one is obtained by the addition of the results for each dimension, thus dimensions are not analyzed separately. This measuring instrument was privileged since it is

adapted to the context of the teachers and administrative staff, and it was used during the previous studies within the organization.

The measuring instrument used to measure the leadership style of the immediate supervisor is Bass multifactor leadership questionnaire (MLQ). This one was selected because a number of recent scientific studies use it to measure the leadership style. Moreover, it was used before in public organizations (Groulx, 2002; Hunter, 2003). The MLQ has as instructions to indicate the frequency to which the immediate supervisor shows the behaviors described in the statements.

The transformational leadership is measured by four sub dimensions, that is to say the idealized influence, the inspired motivation, the intellectual stimulation and the individual consideration. A coefficient alpha of 0.95 (Hunter, 2003) is identified for the transformational leadership.

4. Results and Discussion

With an aim of respecting the various borrowed measuring instruments of scientific documentation, we first of all reversed the questions which measured the concepts in an indirect way. Thereafter, we carried out a filtering of the data using the examination of the frequencies of each item. This exercise enabled us to realize that no error of data capture was present.

In order to evaluate the degree of internal consistency of the measuring instruments, indices of fidelity (alpha of cronbach) were calculated starting from the sample. To this end, Table 1 presents the indices of fidelity just as the sources of the various

scales of measurement of which we used within the framework of this research.

According to Nunnally (1978), the value of alpha of cronbach must be higher than 0.70 for a research of an exploratory type. The whole of the scales of measurement presents a coefficient alpha higher than the standard. First of all, the scale of affective organisational commitment is characterized by a coefficient alpha of 0.77. The scale of the total job satisfaction has a coefficient alpha of 0.85. With regard to the scale of the intrinsic motivation, a coefficient alpha of 0.81 was found. The scale of the perceived organisational support is equivalent to 0.85, while the scale of the transformational leadership style has a coefficient alpha of 0.90.

Table 1. Index of fidelity and sources of the scales of measurement

Scale of measurement	Coefficient Alpha (α)	Source
Work Motivation Scale	0.81	Hunter (2003)
Affective Commitment Scale	0.77	Allen and Meyer(1990)
Perceived Organizational Support Questionnaire	0.85	Eisenberger et al. (1986)
Scale of measurement of total satisfaction	0.5	DRERH (2001)
Bass Multifactor Leadership Questionnaire (MLQ5x)	0.90	Base and Avolio (1996)

In order to verify my research assumptions, I will carry out multiple linear regression analyses. However, before carrying out the interpretation of each analysis, we must deal with the aberrant values and ensure that the postulates of the model of multiple linear regression are respected. For the first stage, we eliminated the aberrant values for more or less two standard deviations. Then, we carried out the analysis of residual in order to check the postulates of linearity of null residual, variance, absence of correlation and standardization.

First of all, the first postulate of the linearity of the model of regression which is checked by the observation of the graph of residual is respected anyway. Thereafter, we made the examination of the second postulate which supposes that the errors are null averages. The third postulate supports that there is homoscedasticity of the errors, and this one is also respected for all the analyses. As for the fourth postulate which returns to the absence of autocorrelation between the errors, this one is checked by the test of Durbin and Watson.

For the whole of the analyses, it is possible to accept the null assumption, which means that the postulate is respected. The results in Durbin Watson will be reported during the individual interpretation of each analysis. As for the last postulate of the absence of multicollinearity or singularity, Collinearity Statistics makes it possible to affirm that it is respected for the totality of the analyses.

Calculations of the interactions

For the preparation of the analysis of the moderating effects, we calculated the interaction between the independent and moderating variables in question. More particularly, we made a multiplication of the standardized scores of the intrinsic motivation by those of the perceived organisational support, as well as standardized scores of the intrinsic motivation by those of the transformational leadership style. These procedures made it possible to create two new variables which represent the effects of interaction of the moderating variables, and those will be used during the multiple linear regression analyses.

Multiple linear regression analyses

As initial analyzes, a multiple linear regression was carried out to verify the first assumption, which assume that the intrinsic motivation has a positive and significant influence on affective organisational commitment, twinned with the third assumption which supposes that the perceived organisational support has a moderating effect on the force of linear association between the intrinsic motivation and affective organisational commitment, and that this effect is positive. Thus, the intrinsic motivation was used as independent variable, the organisational support perceived like moderating variable and affective organisational commitment like dependent variable. The first analysis of multiple linear regression shows an explanatory relationship (R^2 adjusted = 0.594) significant ($F(3, 45) = 22.945, p < 0.05$) of the affective organisational commitment by the intrinsic motivation and the perceived organisational support, as an independent variable, since the moderating effect of the perceived organisational support is not-

significant. In other words, the intrinsic motivation and the organisational support have significant distinct effects on the affective organisational commitment. Considering that the interaction between the intrinsic motivation and the perceived organisational support is not significant, and with an aim of knowing the bonds of specific explanations of each variable on affective organisational commitment, a multiple linear regression was carried out with the method stepwise. This one reveals that the perceived organisational support makes allows to explain 39.4% of the variations of the dependent variable, while the intrinsic motivation makes it possible to explain 19.9%.

Table 2: Multiple linear regression Analysis for the intrinsic motivation and the organisational support perceived in the prediction of affective organisational commitment.

	β	ΔR^2
<u>Enter² Method</u>		
intrinsic Motivation (IM)	0,483***	
Perceived Organisational Support (POS)	0,513***	
IM x POS	0,171	
<u>Stepwise's Method</u>		
Perceived Organisational Support	0,474***	0,394***
intrinsic Motivation	0,472***	0,199***

*p<0,05, **p<0,01, ***p<0,001

A third analysis of multiple linear regression, with the method enter, was carried out to verify **the second assumption**, which proposes that the intrinsic motivation has a positive and significant

influence on the global job satisfaction, and **fourth assumption**, which postulates that the transformational leadership style of the immediate supervisor has a moderating effect on the force of linear association between the intrinsic motivation and the total job satisfaction, and that this effect is positive. Again, the intrinsic motivation was used like independent variable, the transformational leadership style like moderating variable and the total job satisfaction like dependent variable.

The analysis of multiple linear regression shows an explanation linkage (R^2 adjusted = 0.574) significant ($F(3,46) = 21.695 = p < 0.05$) total job satisfaction by the intrinsic motivation and the transformational leadership style, as independent variables, because once again, the moderating effect is not-significant. In other words, the intrinsic motivation and the transformational leadership style has significant individual effects on the dependent variable. By default to observe a significant interaction between the intrinsic motivation and the transformational leadership style, and in order to know the specific explanatory bonds of each variable on the total job satisfaction, an analysis of multiple linear regression of stepwise method was carried out.

This one shows that the intrinsic motivation makes it possible to explain 53.6% of the variations of the dependent variable represented by the total job satisfaction, whereas the transformational leadership style allows to explain 6.6% of its variations.

Table 3: Multiple linear regression analysis for the intrinsic motivation and the transformational leadership style in the prediction of the total job satisfaction.

	β	ΔR^2
<i>Enter Method</i>		
Intrinsic Motivation (IM)	0,623***	
Intrinsic Motivation (IM)	0,277*	
Transformational leadership style (TLS)	0,017	
IMxTLS		
<i>Stepwise 's Methode</i>		
Intrinsic Motivation	0,620***	0,536**
Transformational leadership style	0,280	0,066

*p<0,05, **p<0,01, ***p<0,001

In order to verify the fifth assumption which says that the intrinsic motivation explains more the variations of affective organizational commitment compared to the variations of the total job satisfaction, we made a comparison of the standardized coefficient Beta. This one is higher in the case of the intrinsic motivation associated with the total satisfaction on work ($\beta = 0.620$) than in the case of the intrinsic motivation connected to affective organisational commitment ($\beta = 0.472$).

In addition, the intrinsic motivation makes it possible to explain 53.6% of the variations of the total job satisfaction, while it explains only 19.9% of the variations of affective organisational commitment. These results cancel the final assumption.

5. Conclusion

Within the framework of this research, the general objective was to explore the implications of the motivation on aspects related to the retention. More precisely, the intrinsic motivation was compared with the total job satisfaction and affective organisational commitment. Indeed, results show that the intrinsic motivation presents a significant linear association with the total job satisfaction on work as well as the affective organizational commitment. (Deci et al., 1989 ; Eby et al., 1999 ; Groulx, 2002 ; Richer et al., 2002 ; Hunter, 2003).

The research findings with regard to the moderating effects of the organisational support perceived on the relation between the intrinsic motivation and affective organizational commitment. Just as the transformational leadership style on association between the intrinsic motivation and the total job satisfaction, prove nonsignificant. Even if the assertion of these postulates were founded on a logical theoretical reasoning, those ones were rather of exploratory type.

However, it is interesting to note that the perceived organisational support arises like having an independent significant influence on affective organizational commitment. This one explaining even more the variations of affective organizational commitment compared to the intrinsic motivation. Also, the transformational leadership style of the immediate supervisor exerts a significant independent influence on the total job satisfaction of the subordinates. In this case, the influence of the intrinsic motivation prevails on the other hand.

With regard to the differentiation of the organisational and group levels of immediate work, in connection with the intrinsic motivation, the findings show that this one has a higher influence near the attitudes towards the immediate working group, contrary to what had been expected. Indeed, the explanatory linkage of the intrinsic motivation vis-a-vis the total job satisfaction is stronger than the affective organizational commitment.

This can be explained by the argument that in spite of the organisational culture, the academic hierarchical structure of the services and the transfer of the personnel which involve every time a change of the immediate work environment, this hierarchical structure refers to a perceived or real distance between the individual and the apex of the pyramid. While being in interaction with their environment of immediate work on a daily basis, even the organisational factors affect the individual through this environment. For example, the organisational decisions communication is not necessarily always carried out starting from the top of the hierarchy, but via the immediate work environment.

The concept of proximity can also be taken into account, in the sense that usually a person joins and is more influenced by the events as individuals with whom they have a direct relationship and who belongs to their everyday life. Thus, the immediate working group seems to occupy a great importance in the teachers sphere of work in the sense that the intrinsic motivation of the participants influences more their attitudes at this level.

This study presents some limits. The sample is restricted to which ones campuses of the National University, which is not necessarily representative of the population in general. Moreover, the

characteristic of the field of research weakens the generalization in other milieus. It would be interesting to explore the conceptual model suggested within the framework of this research using a broad sample, within diversified milieus.

All in all, this research makes it possible to show the interest to integrate the concept of motivation in the questionnaire on the keeping in service of the personnel in the institutions of higher education, and to take it into account within the framework of the strategies of the personnel retention, in particular because of the relationship shown with the job satisfaction and affective organizational commitment. More precisely, this research allows to distinguish the implications of the intrinsic motivation at the organizational level and the level of the immediate working group.

References

- Allen, N.J., & Meyer, J.P. (1990). The measurement an antecedents of affective, continuance, and normative commitment to the organization,. *Journal of Occupation Psychology*, 63, 1-18.
- Avolio, B.J., Bass, B.M, & Jung, D.I. (1999). Re-examining the Components of Transformational and Transactional Leadership Using the Multifactor Leadership Questionnaire, *Journal of Occupational and Organizational Psychology*, Vol. 72, N°4, P.441.
- Bass, B.M. (1997). Does the Transaction-Transformation Leadership Paradigm Transcend Organization and National Boundaries? *American Psychologist*, Vol.52, N°2, 130 – 139.

- Blais, M.R., Lachance, L., Vallerad, R.J., Brière, N.M. & Riddle, A.S. (1993). L'inventaire des motivations au travail de Blais, *Revue québécoise de psychologie*, Vol.14, N°3, 185 – 215.
- Deci, E.L., & Ryan, R.M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*, New York, NY: Plenum Press.
- Deci, E.L., Connel, J.P. & Ryan, R.M. (1989). Self-Determination in a Work Organization. *Journal of Applied Psychology*, Vol. 74, N°4, 580-590.
- Direction de la recherche et de l'évaluation des ressources humaines (BRERH) (2001). Unit Morale Profile Briefing Package. Document de référence, Quartier Général de la Défense Nationale, Ottawa, Ontario.
- Dobrevia-Martinova T. (2002), *Occupational Role Stress in the Canadian Forces : Its Association with Individual and Organizational Well-Being*. Thèse de doctorat, Carleton University, Ottawa, Ontario.
- Eby, L.T., Freeman, D.M., Rush, M.C.& Lance, C.E. (1999). Motivational bases of affective organizational commitment: A partial test of an integrative theoretical model. *Journal of Occupational and Organizational Psychology*. Vol.72, p 463.
- Eisenberger, R., Huntington, R. Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support. *Journal of applied Psychology*, Vol. 71, N°3, 500 – 507.

- Griffeth, R.W., Hom, P.W., & Gaertner, S. (2000), A Meta-Analysis of Antecedents and Correlates of Employee Turnover: Update, Moderator Tests and Research Implications for the Next Millennium, *Journal of Management*, 26, 463-488.
- Groulx, E. (2002). Etude des bases motivationnelles de la rétention du personnel: construction et validation d'un modèle théorique. Thèse de baccalauréat non-publiée, Université du Québec en Outaouais.
- Hater, J.J., & Bass, B.M. (1988). Superior's Evaluations and Subordinates' Perceptions of Transformational and Transactional Leadership, *Journal of Applied Psychology*, 73 (4) 695 – 702.
- Meyer, J.P., & Allen, N.J. (1991). A three-component conceptualization of organizational Commitment. *Human Resource Management Review*, 1, 61 – 89.
- Meyer, J.P., & Allen, N.J. (1997). *Commitment in the Workplace: Theory, Research and Application*, Thousand Oaks, California: Sage Publications.
- Mueller, C.W., Boyer, E.M., Prince, J.L., & Iverson, R.D., (1994). Employee Attachment and Non-Coercive Conditions of Work, *Work and Occupations*, 21, 179 – 212.
- Nunnally, J.C. (1978). *Psychometric theory*, New York: McGraw-Hill.
- Pelletier, L.G., Vallerand, R.J., Green-Demers, I., Blais, M.R., &

- Brière, N.M. (1996). Vers une conceptualisation motivationnelle multidimensionnelle du loisir : construction et validation de l'échelle de motivation vis-à-vis les loisirs (EML). *Loisir et société*, 19, 559 – 585.
- Rhoades, L. & Eisenberger, R. (2002). Perceived Organizational Support. A Review of the Literature, *Journal of Applied Psychology*, Vol. 87, N°4, 698 -714.
- Richer, S.F., Blanchard, C., & Vallerand, R.J. (2002). A Motivational Model of Work Turnover, *Journal of Applied Social Psychology*, 32 (10), p.2089-2113.
- Robbins, P.R., & Langton, N. (2001), *Organizational Behavior: Concepts, Controversies, Applications*, Prentice Hall Canada Inc.
- Ryan, R.M., & Deci, E.L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*. Vol 55, N°1, 68 - 78.
- SERUPIA S.E., (2009). *Théories de la motivation au travail*, L'Harmattan, Paris.
- SERUPIA S.E., (2013). Staff Retention in Public Universities in Rwanda: Diagnostics and Strategies of Intervention, RJ, Vol X, Series B. ISSN:2305-5944.
- SERUPIA S.E. Human Resource Management: Exploratory Study on Job Satisfaction of the Personnel Public Service in Rwanda, Vol 3, no 1 2015Rwanda Journal ISSN 2305-2678 (Print); ISSN 2305-5944 (Online) DOI: <http://dx.doi.org/10.4314/rj.v2i1.6B>
- Setton, R.P., Bennett, N., & Liden, R.C. (1996). Social Exchange in organizations: perceived organizational Support, Leder-

Member Exchange, and Employee Reciprocity, *Journal of Applied Psychology*, 81, 219-227.

Spector, P.E (1997). Measurement of Human Service Staff Satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology*, Vol.13, N° 6, 693 – 713.

Spector, P.E (1997). *Job satisfaction: application, assessment, causes and consequences*, Thousand Oaks, California: Sage Publications.

Vellerand, R.J, Blais, M.R, Brière, N.M., & Pelletier, L.G. (1989). Construction et validation de l'Echelle de motivation en éducation (EME). *Revue canadienne des sciences du comportement*, 21, 323-349.

Vellerand, R.J., Pelletier, L.G, Blais, M.R, Brière, N.M. Sénégal, ⌘ Fallières, E.F. (1992). The Academic Motivation Scale; A measure of Intrinsic, Extrinsic, and Amortization in Education. *Educational and psychological Measurement*, 52, N°4, 1003 – 1017.

Vellerand, R.J., & Thil, E.E. (1993). *Introduction à la psychologie de la motivation*. Laval : Etudes vivantes.