

The Work Motivation at the Tunisian Teachers of Physical and Sporting Education

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ABSTRACT: *Work motivation is a complex process involving several interrelated factors (internal and external), the working conditions, the environment of work, social recognitions, pleasure of teaching, etc (Defrance, 1988; Frances, 1983; Curie, Hajjar 1987). However, when the teacher is not motivated to teach, does not invest in the courses, rarely the teacher, especially his motivation to teach, is questioned. The Work of Hofstede (1980) and Roussel (2004) guided our work. This is why this study is centered on the motivation of the teacher of Physical and Sporting Education at their work. We used the questionnaire "Scale of total motivation" builds by Guay, Mageau & Vallerand (2003). Four hundred and nine teachers took part in our study on the intrinsic, extrinsic motivation and the amotivation. The analysis of the absolute error does not reveal a principal effect of the group between the extrinsic motivation, the amotivation and the material taught. On the other hand, there is a significant interaction between the material taught and the intrinsic motivation. The gender does not have an effect on the type of motivations of the teachers of physical and sporting education. Lastly, there is a significant interaction between the extrinsic motivation, the amotivation and the seniority of the teachers of physical and sporting education. Furthermore, the analysis of the absolute error does not prove a significant effect between the intrinsic motivation and the seniority of the teachers of physical and sporting education. We can however conclude that there is well difference in motivation to work according to the seniority and the material taught.*

Keywords: *Intrinsic Motivation, Extrinsic Motivation, Amotivation, Work, Teachers.*

I. INTRODUCTION

Face to the mutations of the school, the issue of the teacher's motivation becomes a national priority. The motivation of the pupil is very often put forward in the literature. This is also the case in physical Education and sports. It is particularly associated to the success of the student. Today many studies try to explain the phenomenon of the motivation in the work context in different approaches such as adaptation, innovation both at the national and international level. Searches are also interested in the motivation at work in both theoretical and practical context, (Guillevic, 1991; Dadoy, 1990). The motivation at work is a complex process involving various inseparable factors (internal and external), working conditions, the work environment, social recognition, teaching pleasure and expectations (Davis, 1989; Frances, 1983; Curie & Hajjar, 1987). However, when the teacher is not motivated to teach, does not invest in courses. Therefore, this study focuses on the motivation of the physical Education and sport teachers.

A first point that generates me some theoretical confusion is the question of singular or plural. As for the concept of competence, there is singular and plural using of the term, Frances (1995) Leplat (1997, 2000) and Montmollin (1997). Frances defined work motivation as a set of aspirations attached to a worker's employment, each of which is assigned a probability factor designs to see their aspirations realized in employment, based on the work performed, the recognition of the work organization. The theory is based on the work of Hull tries to define the motivational process as the product of several factors. (Frances, 1995). The author notes here a generic definition of motivation. Over text produces a semantic shift that, like other authors, he speaks in the singular motivation sometimes, but more often in the plural. In this case, the motivation to work is synonymous with expectations or aspirations.

Another example is even more annoying in the presentation of Vallerand's hierarchical model. The authors indicate that there are three motivations (intrinsic, extrinsic and amotivation). In fact, they do not describe the psychological state of motivation but the consequences of this state: engaging in activity explained by the theory of goals: « Intrinsic motivation refers to the practice of voluntary activity for the pleasure and

satisfaction derived from it. Contrariwise, extrinsic motivation refers to engaging in an activity in a non-inherent in the activity, or to remove something pleasant or avoid something unpleasant once it is completed" (Vallerand, 2001). This multitude of the motivation reading lead us to identify this phenomenon in its triple dimension (intrinsic, extrinsic and amotivation) which corresponds to our goal of study at the sport and physical education teachers. According to Vallerand & Blanchard, (1998), intrinsic motivation declines into three subcategories: intrinsic motivation to knowledge (IM-K); intrinsic motivation to stimulation (IM-S); and intrinsic motivation to accomplishment(IM-A). IM-knowledge is the motivation for doing an activity for the feelings associated with exploring new ideas and developing knowledge. IM-accomplishment refers to the sensations related to attempting to master a task or achieve a goal. Finally, IM-stimulation relates to motivation based simply on the sensations stimulated by performing the tasks, such as aesthetic appreciation or fun and excitement. The common basis of these subtypes is the pleasurable sensations experienced during the self initiated and challenging activity (Noels, Pelletier, Clement & Vallerand, 2003; Demontond & Gaudreau, 2008). In the field of physical education and sport and physical activity, even if the intrinsic motivation is abundantly present, there are also the extrinsic reasons justifying the practice (Ryan & Deci, 2007). Extrinsic motivation refers to the motivations inhabited by a locus perceived causation which tends to be rather external, essentially led by external factors (rewards, bonds, pressure, etc.) (Biddle, Sellars&Hanraha, 2001).

Four forms of extrinsic motivation can be categorized along a continuum characterized by decreasing degrees of self-determined motivation. The first two extrinsic motivations are rather internal commitment reasons, while the last two are more external grounds for commitment.

Thus, the first form of extrinsic motivation is the integrated control where the subject freely chooses to engage in an activity because it perceives a correlation between activity and its internal reasons relating the second form is the extrinsic motivation identified to control. It implies that "the subject is committed because he considers valid activity and that he have identified the importance of commitment" (Ryan & Deci, 2000). The third form is the motivation introjected to control which implies that the individual engages in an activity to avoid negative emotions, such as guilt, or to seek the approval of others (Biddle, Hanraha & Sellars, 2001). This form of motivation shows a weaker internalization of the factors influencing his behavior and actions in the individual. This form of motivation is dependent on external factors (Deci& Ryan, 2000).The last form, where the aspect self-determined motivation is totally absent, is an extrinsic motivation to external control that characterizes the individual who is motivated by external elements in activity as the material rewards or punishment avoidance(Ryan & Deci, 2000). In this case, the commitment is completely dependent on the presence of these external factors, as soon as they disappear; participation fades (Ryan & Deci, 2007).In the opposite side, the self-determination theory (Deci & Ryan, 1985, 2000) has discussed the concept of amotivation. This theory postulates that human behavior in any context can be intrinsically motivated, extrinsically motivated, or amotivated. Intrinsic motivation is evident when individuals freely engage in activities they find interesting and enjoyable, and which offer the opportunity for learning or task accomplishment (Pelletier, Fortier, Vallerand& al., 1995). Deci & Ryan (2000) argued that amotivation stems from lack of need satisfaction. It appears when the individual does not make or link between the action hedoes and the result of this action. An amotivated individual is neither inherently or outside motivated. He was unable to bring his behavior and consequences that are associated with (Deci & Ryan, 1985). In addition, he feels incompetent, believes that there is little or no control over its own actions and do persevere not facing difficulty. Amotives athletes perceive no reason to continue to engage in the activity in which they are incurred (Pelletier, Fortier, Vallerand, Tuson, Brière& Blais, 1995; Ntoumanis, Pensgaard, Martin & Pipe, 2004; Vallerand & Fortier, 1998). As the intrinsic motivation and extrinsic motivation, the amotivation was regarded as a multidimensional variable (Pelletier, Dion, Tuson& Green-Demers, 1999) but this perspective has been little used in the literature in sports psychology.

According to Vallerand and Ratelle (2002), intrinsic motivation, extrinsic motivation and the amotivation help to explain a wide range of human behavior. In addition, the motivation is also composite, that individuals, when they engage in an activity, are often animated simultaneously by several forms of motivation with combinations of intrinsic and extrinsic motivations (Boiche, Sarrazin, Grouzet, Pelletier & Chantal, 2008).

Much more, other factors may influence motivation such as gender, age and teaching matter (Vallerand & al., 1989) has identified several differences between the motivational components of women and men.The following differences were noted: amotivated women are less than men and have strongerintrinsic motivation to knowledge (IMK) and intrinsic motivation to stimulation (IMS) as well as stronger in introjected extrinsic motivation(INEM)and in identified extrinsic motivation (IDEM). Similarly, Sénécal,Pelletier and Vallerand (1992), Vallerand, Fortier and Guay (1997) found that women are more intrinsically and extrinsically motivated than men (IMK), intrinsic motivation to accomplishment (IMAC and IMST), higher INEM and IDEM, as well as a lower amotivation.Men always have a higher amotivation (Sobral, 2004, Larose & al., 2005.) or equal to the women (Larose & al., 2005).

Several studies have been conducted offer us a dynamic view of motivation in its relation with age. They have highlighted the relationship between motivation and perceived competence and age (Wigfield & Wagner, 2005). These differences in the estimation of personal or succeed to achieve a capabilities task vary greatly with age. (Wigfield, Tonks & Eccles, 2004; Fredericks & Eccles, 2002).Chouinard (2001) noted a fall general motivation from the beginning of year and end of year especially in older cases.

Many studies have focused on the educational choices of girls and boys.They show that the literary options are more popular for girls while scientists are more orientations chosen by boys (Halpern, 2000; Marsh, 1989).These differences were explained as resulting from the triple influence of biological factors, stereotypes about gender and social experiences (Halpern, 2000; Halpern & Saw Wai, 2005). TheSocietal factors have recently been reconsidered following the observation of a gradual reduction of the differences observed previously (Hyde, Fennema & Lamon, 1990; Ginsburg, Cooke, Leinwand, Noell& Pollock, 2005).Indeed, it seems that differences in motivation according to the matter are not observed in the present and the measurement tools are criticized by many researchers (Hyde, 2005; Hyde & Linn, 2006; Spelke, 2005).

II. METHODS

The population of study is made up of 409 teachers including 213 teachers of sport and physical education and 196 teachers of the general education (scientific, letters and data processing) of the area of Sfax (city in the Tunisian south). The mean age of the subjects is 43.39 with SD ± 8.52. We chose the questionnaire "Scale of overall motivation" build by Guay, Mageau & Vallerand (2003). The origin form contains 28 items evaluating the overall motivation of the individuals. We selected 14 items which appeared to us best adapted to the topic of the study. Six relate to the intrinsic motivation (ex: " in general, I will work because I feel pleasure to control what I do"), six on the extrinsic motivation (ex: " In general, I will work because I chose it to obtain what I desire") and two on the amotivation (ex: " in general, I will work although I do not see what that gives me"), all these items being presented by chance. The answers to each item are done on a scale of going the Likert type in 7 points of 1 (does not correspond at all) to 7 (corresponds exactly).

III. RESULTS

In order to verify the psychometric quality of the built, an orthogonal factorial analysis of Varimax type (Kaiser, 1958) is carried out on our questionnaire starting from the 14 items (Frederic Guay, Genevieve A. Mageau and Robert Vallerand, 2003). In order to reduce the contents of the table, the weight of the items by factor is registered by .40 criteria also retained by Acher and Haigh (1997).The presented results indicate that the rating scale of the motivation in the context of work has a good internal consistency (alpha = .785) and a good temporal stability (r = test and Re-test = .674).

The results of the exploratory analysis show that the scale of the motivation in the context of teacher's work in the area of Sfax (Tunisia) reproduced well the ideal model with an interesting internal consistency (α = .785). TheResults obtained starting from the matrix of correlation between the 14 items of the motivation in the context of work (table: 1), indicate that there is a positive correlation with p < 01 between the majority of the variables such as "I will work because I find there new interesting elements to learn." Item (8) (r = .512 with p < 01), or "because I wish to obtain prestige." (item11) (r = .423 with p < 01) or "because I feel pleasure to master what I do." (Item 5) (r = .385 with p < 01). We note that there is a correlation to the level of the amotivation (item 14; r = .761). The teachers will work even if they do not believe that is worth the sorrow of it.

Table: 1 – Matrices of correlation of the motivation in the context of work

	Amot1	Amot14	Int.Mot4	Int.Mot5	Int.Mot6	Int.Mot8	Int.Mot10	Int.Mot13	Ext.Mot2	Ext.Mot3	Ext.Mot7	Ext.Mot9	Ext.Mot11	Ext.Mot12
Amotivation 1	1													
Amotivation 14	.761**	1												
Intrinsic Motivation 4	0,027	0,067	1											
Intrinsic Motivation 5	-0,014	-0,042	.385**	1										
Intrinsic Motivation 6	-0,022	0,027	.308**	.438**	1									
Intrinsic Motivation 8	-0,045	-0,013	.512**	.324**	.304**	1								
Intrinsic Motivation 10	0,048	0,011	.219**	.283**	.337**	.360**	1							
Intrinsic Motivation 13	-.200**	-.192**	.160**	.256**	.114*	.220**	.212**	1						
Extrinsic Motivation 2	.345**	.246**	.117*	0,034	-0,028	0,006	-0,009	-0,075	1					
Extrinsic Motivation 3	0,068	.123*	-.125*	0,021	0,079	-0,002	-0,054	0,058	.151**	1				
Extrinsic Motivation 7	-.115*	-0,062	0,061	0,067	.099*	0,027	0,007	0,066	0,049	.109*	1			
Extrinsic Motivation 9	0,085	0,061	-0,061	-0,043	-.123*	-.106*	-0,079	-.100*	0,058	0,057	-0,046	1		
Extrinsic Motivation 11	.304**	.213**	0,003	0,073	-0,012	0,029	.101*	0,007	.423**	0,088	0,058	.212**	1	
Extrinsic Motivation 12	0,05	0,036	-0,021	-0,011	0,017	-0,07	-0,085	-0,002	.190**	.149**	0,037	0,045	.144**	1

** La corrélation est significative au niveau 0.01 (bilatéral).

* La corrélation est significative au niveau 0.05 (bilatéral).

However, there are some coefficients which are small for example in general, I work “because I chose it to obtain what I wish” (Item 7) ($r = .099$ $p < .05$) or for “because I’m obliged to do it.” (Item 9) ($r = -.100$ with $p < .05$). The matrix has an original variance equal to 14 since it there at 14 variables in the matrix of correlation since each one of measures to a matrix of correlation thus has a variable of (1.0), (table 1).

To test the null assumption according to which the teachers of the area of Sfax (Tunisia) go to work for the pleasure, satisfaction and personal competence. The sphericity test of Bartlett, gives us a value of 1091.297 to $p < .001$, which makes it possible to reject the null assumption and to accept the alternative assumption. The examination of the individual variables is facilitated by the adequacy measurements calculation of the sampling of Kaiser-Meyer-Olkin (KMO). This index calculated by the matrix of inter correlation is particularly hopeful (.661). By taking account of the particular conditions (matrix of inter correlation, KMO and the sphericity of Bartlett), we carry out now the extraction of the principal components of these data. This variance set out again between the various components which we want to extract by calculating the eigenvalue «Eigenvalue "for each component.

We note that the eigenvalue of the first component is 2.575, which corresponds to 18.39% of the original variance (14.0 variables). The second component explains 2.327 units of variances on 14.0 variables, which corresponds to 16.24% of the original variance. The third component explains 1.351 units of variances on 14.0 variables, which corresponds to 9.65%. Lastly, the fourth component explains 1.08 units of variances on 14 variables, which corresponds to 7.71%. We can thus say that after having extracted four principal components, we would be able to say that 52.37 % of the variance of the motivations in the context of the teacher’s work in the area of Sfax (Tunisia).

Table: 2 Matrix of the components after orthogonal rotation of Varimax type: Variation with standardization of Kaiser of dimension in the context of work.

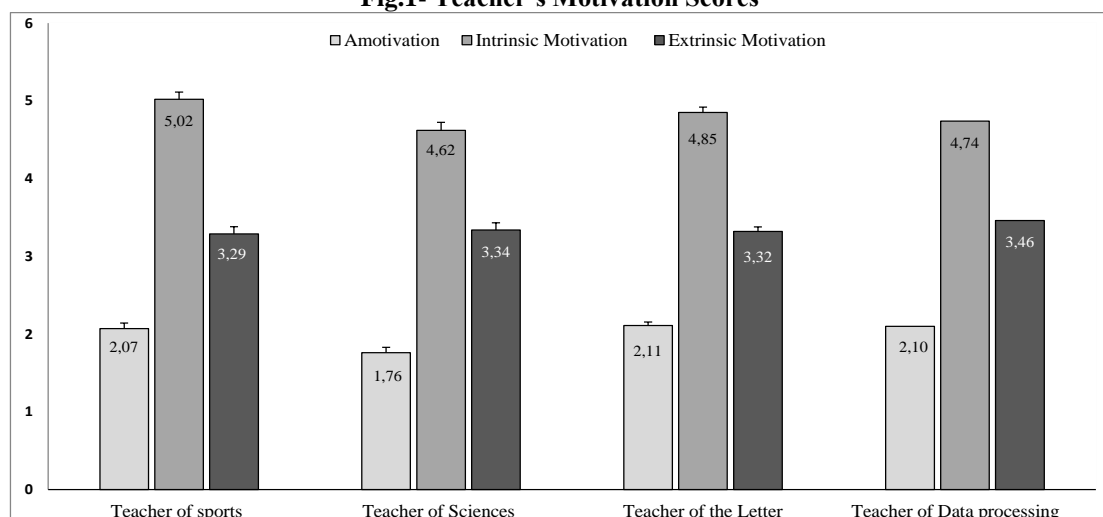
	Components			
	1	2	3	4
Amotivation 1		0,918		
Amotivation 14		0,924		
Intrinsic Motivation 4	0,695			
Intrinsic Motivation 5	0,707			
Intrinsic Motivation 6	0,675			
Intrinsic Motivation 8	0,734			
Intrinsic Motivation 10	0,633			
Intrinsic Motivation 13	0,695			
Extrinsic Motivation 2			0,503	
Extrinsic Motivation 3			0,711	
Extrinsic Motivation 7			0,544	
Extrinsic Motivation 12			0,572	
Extrinsic Motivation 9				0,791
Extrinsic Motivation 11				0,705

The examination of the matrix of the factorial weights after rotation of the Varimax type (table: 2) makes it possible to note that the first component is defined by the intrinsic motivation "in general, I will work for the pleasure of acquiring knowledge" (.695), "in general, I will work because I feel pleasure to control what I do" (.707), "in general, I will work because I test pleasant feelings by doing it" (.675), "in general, I will work because I find there new elements interesting to learn" (.734), " in general, I will work for the pleasant feelings which I feel" (.633) The second component, as for it, is defined by the non-motivation " in general, I will work although I do not see what that gives me" (.918) and " in general, I will work even if I do not believe that that is worth the sorrow of it " (.924). The third and fourth component explain the extrinsic motivation in general, I will work because I chose it like means to carry out my project " (.711), " in general, I will work because I chose it to obtain what I desire" (.544), "in general, I will work because I’m obliged to do it" (.791) ", I will work because I would badly smell myself not to do it" (.572) and finally, " in general, I will work because I wish to obtain prestige ".

Work motivation of the teachers of physical education and sport according to the material taught (fig.1) reveals that the teachers of physical and sporting education (mean = 5.02) have a higher score on the scale of intrinsic motivation than the teachers of the general education (mean of the teachers who teach the scientific

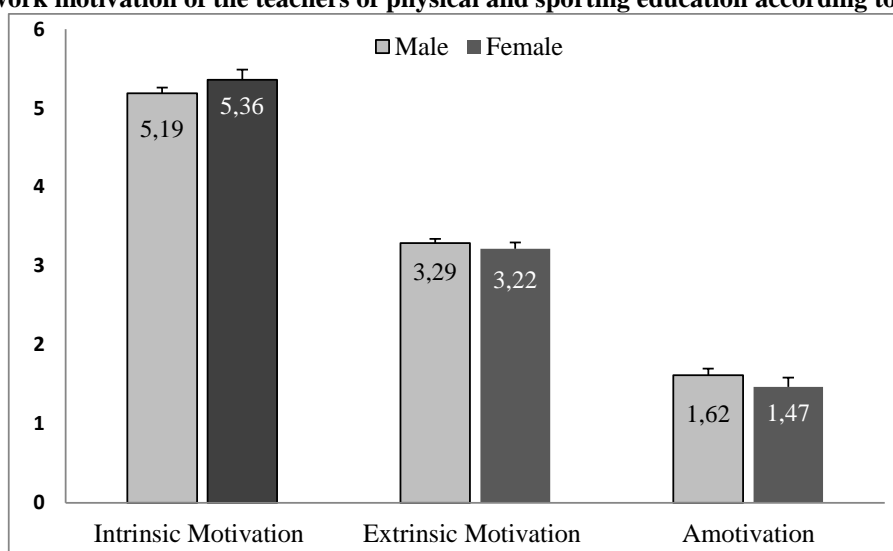
matters = 4.62 and 4.85 for the teachers which teach the literary matters and finally 4.74 for the teachers of data processing). The teachers who teach the literary matters (mean = 2.11) have a score more raised of amotivation than the other teachers. The analysis of the absolute error does not reveal a principal effect of the group between the extrinsic motivation, the amotivation and the material taught ($F(3,405) = 0.709$ with $p = 0.5$ vs $F(3,405) = 1.99$ with $p = 0.1$). By cons, there is a significant interaction between the material taught and the intrinsic motivation ($F(3,405) = 3,405$ with $p < .01$).

Fig.1- Teacher's Motivation Scores



The work motivation of the teachers of physical and sporting education according to the gender (fig. 2) shows that teaching physical and sporting education have a score more raised on the intrinsic scale of motivation than the men ($m = 5.36$ vs 5.19). On the other hand, the teachers of physical and sporting education (men) have a score on the scale of extrinsic motivation and amotivation higher than the women's one (mean = 3.29 and 1.62; cf fig.2). In spite of this difference of the averages, the analysis of the variable error does not reveal a principal effect of group between the motivation of the teachers of physical and sporting education in the context of work according to the gender (for the amotivation, $F(1,211) = 0.905$ with $p = 0.3$; the intrinsic motivation, $F(1,211) = 1.38$ with $p = 0.2$ and the extrinsic motivation, $F(1,211) = 0.507$ with $p = 0.4$).

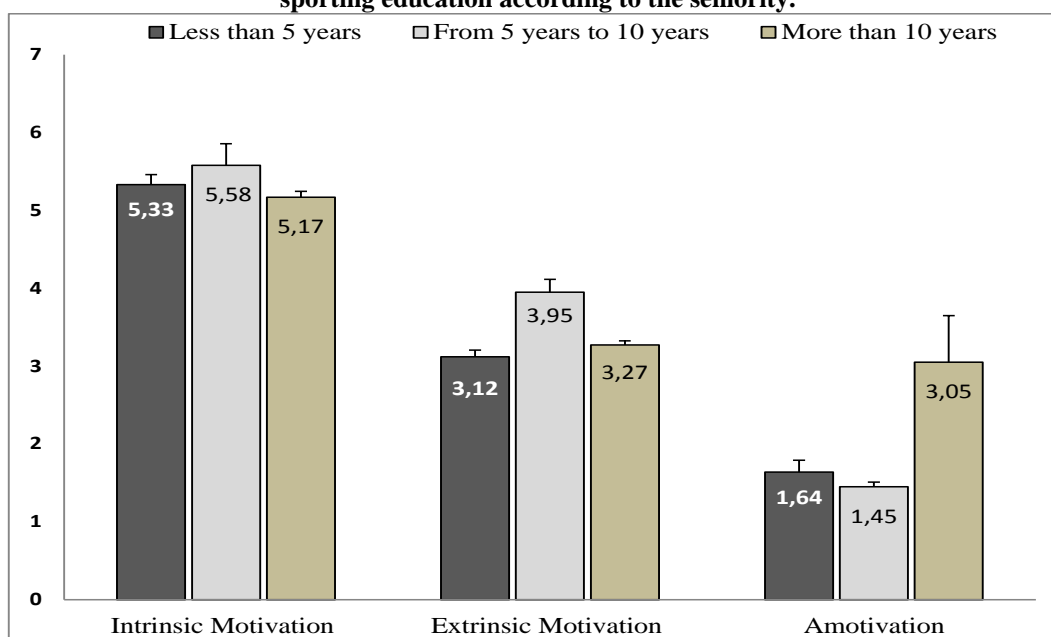
Fig. 2 – the work motivation of the teachers of physical and sporting education according to the gender



The analysis of the motivation of the teachers of physical and sporting education in the context of work according to the seniority (fig.3) affirms a principal effect of the group. Therefore there is a significant interaction between the amotivation and the seniority of the teachers of physical and sporting education ($F(2,210) = 15.176$ with $p < .001$). More he advances in age, less he is motivated to work (fig.3). This principal effect of the group is observable also between the extrinsic motivation and the seniority of professors ($F(2,210) = 7.668$ with $p < .001$). On the other hand, the analysis of the absolute error does not prove a significant effect

between the intrinsic motivation and the seniority of the teachers of physical and sporting education ($F(2,210) = 1.369$ with $p = 0.2$).

Fig. 3 – The work motivation of the teachers of physical and sporting education according to the seniority.



IV. DISCUSSION

Our study aimed to show the impact of gender and seniority of the teacher's motivation to work while comparing the teachers of sport and physical education with those of general education. We compared the levels of intrinsic and extrinsic motivation also the amotivation at individuals in the region of Sfax Tunisia

The overall motivation scale built by Guay, Mageau & Vallerand (2003) present an important support for our research to clarify this issue and to test our hypotheses. The results of the exploratory analysis showed that the level of the overall motivation in the context of the work of teachers of Physical Education and Sports of the Sfax region reproduces the theoretical model with a satisfactory internal consistency ($\alpha = .785$) for all 14 items of the inventory (Kaiser 1958).

The principal component analysis allows us to identify that the teachers of sport and physical education have a superior value at intrinsic motivation among women than men which confirm with the studies of Sénécal, Pelletier and Vallerand (1992), Vallerand, Fortier and Guay (1997) who found that women are more intrinsically and extrinsically motivated than men in intrinsic motivation to knowledge (IMK), in intrinsic motivation to accomplishment (IMAC) and in intrinsic motivation to stimulation (IMST), higher in introjected extrinsic motivation (INEM) and in identified extrinsic motivation (IDEM). By cons men have higher scores in amotivation than women which accord with the results found by (Sobral, 2004, Larose et al, 2005) who noted that men are more amotivated than women. The work motivation results show us a significant interaction between the amotivation and the seniority at the teachers of physical and sporting education. More they advance in age; less they are motivated to work confirming with (Wigfield, Tonks & Eccles, 2004; Fredericks & Eccles, 2002). Also with Chouinard (2001) who noted a fall general motivation from the beginning of year and its end especially in aged cases. Furthermore (Wigfield & Wagner, 2005) have highlighted the relationship between motivation and perceived competence and age. Thus (Ripon, 1987; Salleh, 1981; Goin & Kanungo, 1980) confirmed that there is a significant relation between motivation and seniority. Lastly, work motivation of the teachers of physical education and sport according to the material taught reveals that have a higher score on the scale of intrinsic motivation than the teachers of the general education. These results are tributary of the aspirations such as (pleasure, knowledge and goal setting) that the teacher of sport and physical education attaches to his work which contribute with the results found by (Feerchak, H., 1996; Frances, 1995; Chiffre & Toboul, 1984).

V. CONCLUSION

The results of this research, carried out in the particular context of the teaching work show us in the first hand the great importance of motivation in the academic area, in the other hand its inter correlation with gender, age, seniority with the material taught. Furthermore, our results confirm the existence of different types

of motivation and induction of positive or negative consequences depending on whether the teacher develops types of motivation. Specially for teachers of sport and physical education who perceive the motivation as a main factor contributing to the success of their profession

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