

Work Attitudes as Predictors of Job Satisfaction among Academic Teachers

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Abstract

The article presents the results of a research on the possibilities of explaining job satisfaction of academic teachers in Poland. Hierarchical multiple regression analysis was applied. The aim of the research was to examine the importance and strength of autotelic and normative work attitudes in explaining subjective job satisfaction of teachers in the area of teaching, research and organization. The research covered a group of 367 academics working in universities in Northern Poland. The research has shown that job satisfaction of academic teachers can be explained to a greater extent by the work attitude they present rather than by the social support received and the atmosphere at work. It turned out, however, that this applies only to job satisfaction in the field of teaching and research. In the case of organizational work, the level of satisfaction with its performance proved to be dependent more on interpersonal relationships in the workplace.

Keywords: academic teacher, job satisfaction, work attitudes, multi-dimensional professional role, professional success

1. Introduction

The profession of an academic teacher has always enjoyed a high social prestige, and his teaching activities, involvement in research work, personality traits invariably are considered to be important determinants of intellectual, emotional, moral and social development of students. An academic teacher, as a tutor and a researcher, is burdened not only with the responsibility for his own development and that of his students but also the development of culture and universal knowledge, of institutions in which he works, of the region, country, or even the European Union. Duties of university teachers cover not only teaching (which, itself, obliges the teacher to a permanent acquisition of new knowledge and the ability to transfer it in a communicative way) but also research work and, more and more often, also administrative work (Łobocki, 1999). The role designated today to an academic teacher in Poland becomes more and more ambiguous, and is often divergent from measurable criteria of professional excellence (Konarzewski, 2008). A particular difficulty arises from the ambiguity of defining one's own professional achievements. The ambivalence of the role of a modern university teacher is sometimes associated with professional expectations that prove impossible to be fulfilled, or the fulfilment of one of them precludes the possibility of implementing other¹.

¹ We can say that “[...] it is a special profession belonging to the small group of impossible professions, that is professions in which tasks largely exceed possibilities of their realization”. We observe here a basic dimension of the dissonance between the expectations from an academic teacher and his possibility to fulfill them. It is also, as it seems, a substantial professional dilemma of a contemporary teacher (also an academic one); quote after S. M. Kwiatkowski (2008, p. 28).

Among the diverse professional tasks, regardless of the scientific degree, an academic teacher is obliged, *inter alia*, to: a) research and development; b) establishing cooperation with other research institutions (in the country and abroad) in order to e.g. participate in research internships; c) self-fundraising for research; d) timely acquisition of higher scientific degrees; e) popularization and commercialization of the results of his own research; f) setting and continuous improvement studies curriculum in line with the National Qualifications Framework for Higher Education; g) implementation of organizational duties (tutor of internships, tutor of the year, etc.); h) perform other organization tasks (membership in committees, councils, advisory teams, performing administrative functions); i) develop cooperation with external stakeholders and, finally, j) teaching. In many universities academic teachers are also obliged to promote and implement the economic activities carried out by the universities in order to raise funds for the school's activities.

An academic teacher nowadays ceased to be just a researcher and a tutor (which itself defined the profession's identity and filled the teacher's working time excessive of the statutory timeframe), but must become a manager, coordinator, an entrepreneur and constantly take care of his intellectual development, and also himself take care of his financial situation, that would allow him to implement and popularize the results of his own research. But even meeting all professional requirements does not provide a contemporary academic teacher a job security. Such facts as, *inter alia*: a) acquisition of subsequent scientific degrees (especially from the PhD habilitation up, and further to the professor), which is the basis of maintaining employment, and in many cases not successful despite significant scientific achievements; b) population decline periods, resulting at many universities with a significant decrease in the number of students and the resultant decline in the number of taught fields of study; c) financial problems force university authorities to reduce the cost of students' education (minimized curriculum, combining smaller groups of students into bigger ones, implementing e-learning), which makes many teachers redundant; d) state policy (Polish Accreditation Committee), aiming to transform state-owned universities into schools of a vocational profile (instead of a universally academic), which entails a complete cessation or drastic reduction of funding the research activities conducted in these universities by the State are among the facts that contribute to a lack of job security and therefore – lack of professional stability.

The fact that the complex and multi-dimensional professional role obliges teachers to submit their everyday work life to work while feeling a strong job insecurity can have consequences such as changes in attitudes towards work and organization, as well as in attitudes towards oneself. Therefore, it is worth examining just how in these uncertain and ambiguous conditions teachers perceive their job satisfaction and which factors determine it.

1.1. Work Attitudes

General work attitudes can be divided into two main groups (Furmanek, 2004): treating work in terms of "to have" and in terms of "to be". In the first case we have to do mainly with the perception of work as a constraint associated with the financial issues (work treated as a source of funds required to meet life needs). When it comes to treating work in terms of "to be", work can be, however, regarded as: a) a commitment (work treated as a duty to the society); b) an opportunity to develop personal and social identity (work offers a possibility to define one's role in the society); c) realization of one's life goals (work is a form of self-fulfilment); d) an indicator of social prestige (defining its place in the social hierarchy); e) a possibility to establish social contacts (characterized by the need to maintain social contacts).

1.2. Job Satisfaction – Terminology

The phenomenon of achieving or experiencing job satisfaction carries a multiplicity of interpretative possibilities, especially because the concept is linked to other factors, such as: professional success, career, job satisfaction and identification with the professional role. It is important to exactly determine the key semantic meaning and scope of these considerations of the concept of job satisfaction. It seems that the notion of career success has the closest meaning to the concept of job satisfaction.

There are many kinds of success, related to the values a man follows. The measure of success for an individual is not always what constitutes success in the opinion of other people. Objective measures of success are therefore extremely difficult to assess due to the highly subjective nature of the concept (Michalak, 2007). The feeling of satisfaction (satisfaction of achieving it) on the one hand and appreciation of others on the other remains, however, an inalienable feature of success. An attempt to systematize the concepts of professional success was made in Poland in the late 1970s. R. Łukaszewicz (1979) defined career success as a "symbol-reward, expressing acknowledgment of the achieved goal of a high score by others".

Note, however, that social recognition does not always have to be considered as a prize. It seems to be a necessary but insufficient condition to achieve professional success by a teacher. A teacher can in fact achieve great results, but at the same time not achieve professional success. This is of particular importance in the work of an academic teacher. We should remember that in Poland: a) high scientific achievements do not guarantee a promotion at work (especially at PhD habilitation level), b) high evaluation of teaching does not guarantee employment stability (since it is in the greatest respect conditional on promotion), and c) high involvement in work organization does not in general guarantee any objective measure of success. Teacher's professional success can therefore be considered in at least two dimensions (Michalak, 2007): subjective and objective. However, the border line between subjective and objective dimension remains vague. It seems impossible to always observe a convergence between external assessment and internal sense of satisfaction. Professional success consists thus of the level of measurable and objective performance and of job satisfaction (a sense of fulfilment of one's own needs and aspirations). Seemingly, it appears that when a teacher attains the expected results, it entails professional success. In reality, however, an academic teacher can achieve high performance at work, but not achieve professional success, including work satisfaction.

Professional satisfaction is defined in various ways, and many years of research on this issue resulted in a multitude of attitudes and definitions of the concept². We assume that the work of an academic teacher, constantly improved and developed, should provide him with a sense of satisfaction. Satisfaction is an important aspect of teacher's work quality and the perception of his work as well as the level of satisfaction will in turn affect the professional activity of teachers – the level of commitment and identification with the profession, creativity, motivation for development. The effects of the sense of professional satisfaction, or lack thereof, among teachers are more important in a social scale than those effects among the representatives of most other professions (see Wiśniewski, 1990; Murawska, 2008).

Job satisfaction providing factors can also be divided into three groups (Lortie after: Wiłkomirska, 2002, p. 95): external (e.g. salaries, social status), psychological (satisfaction with one's achievements – in case of teachers: teaching, research, organization) and additional (e.g. privileges, such as long holidays). Previous research on job satisfaction of teachers supports the conclusion that the common factor that determines job satisfaction is a sense of personal achievement at work, that is a psychological factor. L. Evans (1998) identifies two factors of job satisfaction. These are: work comfort - firstly, the level of satisfaction of teachers with working conditions and the atmosphere, and secondly, professional fulfilment - a state of mind encompassing all the teacher's emotions, born out of a sense of his personal success, which is attributed to his own activity in the professional fields that are important to him (after: C. Day, 2008, p. 99). After carrying out a comparative study of job satisfaction of teachers from several countries W. Wiśniewski (1990, p. 85) considers satisfaction to be "a declaration of the respondents [...] of such attitudes and behaviours that enable them to find positive solutions to the conflict in their work environment and that lead to acceptance of their professional role and educational functions they currently perform." The study also distinguished factors determining high satisfaction, which are: the freedom to decide how to perform one's job, clear definition of professional responsibilities, good atmosphere at work, respect from the environment. Z. Kawka noted that as far as teachers are concerned, job satisfaction includes "dimensions of formal rights and responsibilities, activities, partners, conditions and rewards" (Kawka, 1998, p. 109). The author examined the relationship of the perceived satisfaction with a tendency to normative thinking that she had attributed to teachers. The final conclusions of the study showed a strong dissonance between the importance of their role, the satisfaction with contact with pupils / students and material deprivation, which weakens the teachers' satisfaction with work.

Satisfaction is associated with attitudes toward one's own job (Maliszewski at al. [Eds.], 2005, pp. 168-172), sometimes also referred to as job satisfaction, i.e. "the emotional reaction of pleasure or regret experienced in relation to the performance of specific tasks, functions and roles" (Strelau [Ed.], 2000, p. 329). There are various factors that determine the feeling of satisfaction.

² Schafer (1953), Herzberg (1968) and Lawler (1973) described satisfaction in the aspect of realization of personal needs or expectations; Locke (1973) defines it as a positive emotional state resulting from achieving values related to work, while Lortie (1975) and Nias (1973) identify satisfaction with a sum of all the rewards given by work; after: A. Wiłkomirska (2002, p. 93).

They may be "a relatively high salary, a fair wage system, real opportunities for promotion, a caring and active management, an appropriate degree of social interaction at work, interesting and varied tasks and a high degree of control over the pace and methods of work" (Armstrong, 2000, p. 121).

These factors are called the professional field satisfaction factors. There are also the non-professional field satisfaction factors - individual factors, which are: age, health condition, seniority, emotional stability, social status, adequacy of the work, using one's skills or having a family or social contacts. Undoubtedly, the degree of satisfaction is an individual matter and depends largely on the subjective needs and expectations. Analysing individual properties, the authors note, *inter alia*, that the older the employee, the bigger his satisfaction is. This correlates with another pattern: the longer the work experience, the greater the satisfaction is. Cognitive abilities play a significant role there, and the people who work below their level of intelligence do not feel satisfied, while those performing the tasks exceeding their intelligence may feel frustrated. This is linked to the appropriateness of work or, in other words, the match between the skills and the requirements of a given job, as well as the use of previously acquired skills and experience. Satisfaction also increases together with the increase of the status of the performed work (cf. Schultz, Schultz, 2002).

In this article, the academic teachers' job satisfaction will therefore be understood as a satisfaction with various aspects of their professional role and practice (see: Kawka, 1998). Previously, the largest number of research on job satisfaction of teachers was focused on the search for factors that build it and its level correlates (cf. e.g. Wilkomirska, 2002). Our research fits into that trend and is presented in further sections of the paper.

1.3. Work Attitudes and Job Satisfaction - a Review of Empirical Research

The research on work attitudes and their relationship to productivity and career development were presented in the world literature primarily in terms of treating work as a personal vocation (the "to be" attitude). The research carried out in this subject shows that the attitude allowing to perceive work as a vocation has an impact on the level of professional achievements, e.g. in the form of increased job satisfaction (Dobrow, Tosti-Kharas, 2011; Duffy et al., 2012; Hirschi, 2012). Commitment to work turns out to be an important construct of job satisfaction and is significantly associated with labour productivity (Christian, Garza, and Slaughter, 2011). Such variables as deep passion for work and a sense of accomplishment that it can bring are also associated with job satisfaction (Dobrow, Tosti-Kharas, 2011). According to Ryan Duffe's and his colleagues' research (2012) that also the sense of vocation to the performed job has a significant impact on job satisfaction, but commitment to work is an important moderator of this relationship. The involvement in the organizational issues, being an expression of an employee's identification with the institution in which he works and his personal attachment to the organization, consists of three components: affective commitment (positive emotional attitude to the organization), involvement of duration (related to the fear of the costs of leaving the job or lack of employment alternatives) and normative (sense of commitment and loyalty, gratitude to the organization) (Meyer, Allen, 1991).

Positive attitudes towards work (sense of vocation) appear to also promote better work effects, such as job satisfaction and a smaller desire to resign from work (Berg, Grant, Johnson, 2010). People with a sense of vocation are more involved in their career and it brings them greater satisfaction. It seems that the mechanism that leads to greater work satisfaction among people with the feeling of vocation lies in the internal commitment to the development of their careers, and at the same time a smaller intention to withdraw from the undertaken professional tasks. Therefore, a job that has a personal meaning for a person leads to greater satisfaction with his performance. Also, the theory of *self-compatibility* (compatibility of ME) (Sheldon and Elliot, 1999) indicates that people realizing professional goals for autonomous reasons, e.g. due to internal pleasure, show a higher level of professional success (they are more productive) than people realizing external goals. So we feel entitled to conclude that attitudes towards work are an important variable which might condition the job satisfaction.

2. Research Methods and Procedures

The aim of the research is to determine the linear relationship between autotelic and normative work attitudes and the social capital at work vs. job satisfaction among academic teachers. The research is correlational and, therefore, its objective is not to unequivocally determine the direction of any dependencies, but to select the relations and attempt to explain them. Despite these limitations of the study of job satisfaction factors, the attitudes towards work seem to be the probable keys to explain the mechanisms of achieving favourable results at work. Thus, the aim of our research is to determine the significance and strength of each of these variables as predictors of job satisfaction among academic teachers.

Job satisfaction was adopted as an outcome variable. As predictors of job satisfaction among academic teachers we adopted their explicit (autotelic and normative) attitudes towards work, work atmosphere and the received social support (social capital in the workplace), as well as the period of work in the institution.

2.1. Measurement Tools

i. "Job Satisfaction of an Academic Teacher" Scale (by Jaworska)

Is used to measure job satisfaction with organizational work, teaching and research development. The questionnaire examines, in a simple way, the subjective satisfaction with individual components of an academic teacher's work by asking for an assessment of the satisfaction using a Likert-type scale in the range from 1 to 7.

ii. "Work Attitudes Scale" (by Jaworska)

The measurement of explicit work attitudes was made using the "work attitudes scale", which is a two-factor tool measuring the level of autotelic and normative attitudes towards work. The first factor (autotelic), explains 31.6% of the total variance of evaluations. The reliability of this dimension is calculated using a multidimensional exploratory technique - the analysis of the reliability of Crombach's $\alpha = 0.81$. The second factor, which measures normative attitudes, explains 22.9% of the variance evaluations, and its reliability is Crombach's $\alpha = 0.76$. A high score in autotelic factor means that work is seen as an activity that brings enjoyable and psychological benefits (opportunity for self-development), while a low score indicates treating work primarily as a forced and unpleasant activity resulting above all from the economic needs. However, in the case of the normative factor, its high score means that work is seen as an activity carrying benefits to the society and defining social identity of the person, while a low score indicates a denial of the role of work in terms of social benefit. In the research, IBM SPSS Statistics 21 software was used for statistical analysis.

iii. "Social Capital at Work Short Scale" (cultural adaptation Jaworska, Galewska, Baryła)

The measurement of social support in the workplace was made using a shortened version of the social capital scale translated by Jaworska, Galewska and Baryła. Positions of social capital for the Polish version of the scale were taken from the scale published by Kouvonen and colleagues (2006) and subjected to a cultural adaptation to Polish conditions. These positions include the perspective of people's perception of social inequality in the workplace. They indicate the extent to which people feel that they are respected, valued and treated equally at work, and have a feeling that not everything is a result of their work seniority and their position in the hierarchy. The scale has a satisfactory internal consistency. One general factor that explains more than 60% of the total variance of evaluations was indicated. The obtained Crombach's α value equals 0.90, which indicates a satisfactory reliability of the scale and allows it to be used for research in Polish conditions.

iv. Atmosphere at Work

The measurement of the atmosphere at work was made with the help of questions about the level of satisfaction with the working environment, understood as interpersonal relationships in the workplace. The respondents' answers were given in a seven-point Likert scale.

2.2. Hypotheses

Given the documented relationships between the work attitudes and job satisfaction, we assume that:

H.1 The level of job satisfaction among academic teachers (with teaching, research and organizational work) to a greater extent can be explained by the attitudes towards work they present than by the social capital and the atmosphere in the workplace. This relationship will be stronger in the case of autotelic attitudes (treating work as an opportunity for personal development) rather than normative (treating work as an activity beneficial for the society).

H.2 The relationship between different measures of job satisfaction and work attitudes will be stronger in the case of autotelic attitudes (treating work as an opportunity for personal development) rather than normative (treating work as an activity beneficial for the society).

2.3. The Respondents and Research Procedure

The research was done in the period of December 2013 to June 2014 at public and private universities in Poland. The research was carried out as a survey and included 367 test teachers working in positions of assistant ($N=62$), assistant professor ($N=182$), professor ($N=66$) and a senior lecturer ($N=57$).

The sample covered 240 women and 127 men aged 28 to 68 years ($M=45$, $Do=34$). Seniority of the respondents at the university fluctuated in the range of 1 to 35 years ($M=14$, $Do=8$).

3. Results

Before analysing the relationships between variables, we should notice the general trends reported by academics in the shown level of job satisfaction, subjective assessment of the atmosphere at work and the received social support (social capital in the workplace).

The indicators of the average level of satisfaction of teachers with various dimensions of subjective career success are included in Table 1 (*all tables are located at the end of the article*). The academics feel the lowest satisfaction in this regard in relation to the organizational work for the university, and relatively the highest in relation to research work. The overall average level of job satisfaction varied between 4.93-5.45 on a seven-point scale (the closer to 7 the higher the level of satisfaction). The teachers assessed the atmosphere (relationships) prevailing at work much less favourably, resulting in an average score of 3.79 on a seven-point scale. The maximum number of points concerning the level of social capital of work was 40 points. In terms of this variable, academic teachers achieved an average score of 22.09 points indicating a rather low sense of social support received by them in the workplace.

In order to verify the hypothesis about the possibility of explaining job satisfaction of academic teachers through their attitudes towards work and work atmosphere, we used the multiple regression analysis. This will allow to create a linear model, thanks to which we will be able to predict the result variable - *job satisfaction of an academic teacher*. The aim of the analysis is to determine whether one can predict the level of individual measures of job satisfaction among academics by the level of positive (autotelic and normative) attitudes towards work they present and to search for answers to the following question: what is the contribution of other predictors (atmosphere at work and capital social and work experience).

Due to multiple factors used in the applied scales and the need to keep the research as clear as possible, the presentation of the results will be given separately for each dimension of job satisfaction (satisfaction with research, educational and organizational work). The order of the analysis presented below therefore includes: 1) analysis of the correlation between all the variables; 2) analysis of the strength of the possibility of explaining individual measures of professional success using predictors receiving significant values in the correlations with result variables. Such a system of analysis was applied according to the importance of the order in which the predictors are introduced into the model.

3.1. Analysis of the Correlation between Variables

The first phase of the analysis covered the relationships between all the variables specified in the research procedure. The values of Pearson's r coefficients are presented in Table 2.

Considering the bilateral correlations between the variables it is worth mentioning the significant relationships between the individual factors - attitudes towards work, resources in the form of social capital, the atmosphere at work and the investigated dimensions of job satisfaction. A preliminary analysis of the correlation pairs revealed, *inter alia*, that both autotelic and normative work attitudes have bilateral, positive correlation with all measures of job satisfaction (see Table 2). It means that the higher the level of treating work as an activity beneficial for the society and defining social identity of a person is, the more the satisfaction with performing it increases. Satisfaction with teaching, organizational and research activities also increases along with the increase of perceiving work as pleasure and an opportunity for self-development. These data do not indicate, however, whether the two dimensions of work attitudes towards have the same explanatory power of job satisfaction, nor if the presence of both of them at the same time increases the ability to predict the level of satisfaction. The data presented in Table 1 also show how different dimensions of job satisfaction correlate with other analysed variables. It has been shown that *satisfaction with teaching* correlates in the strongest degree with normative and autotelic work attitudes, followed by the level of social capital and atmosphere at work. A negative, significant though weak correlation of this variable with seniority has also been shown. In the case of *satisfaction with research*, only bilateral, weak correlations with variables such as normative and autotelic attitudes and very weak negative correlation with the seniority of teachers have been observed. The variable of *satisfaction with organizational work* turns out to be but very poorly correlated with autotelic and normative attitudes towards work and moderately correlated with social capital and atmosphere at work.

This correlation system will serve as a starting point for the analysis made later in the article. These analyses include linear relationships between individual measures of work attitudes (autotelic and normative), social capital, atmosphere at work and the subjective sense of job satisfaction on educational, scientific and organizational level.

The presented description of the correlations allowed separating the variables significantly correlated with three measures of job satisfaction among academic teachers. Given the predictions clarified above concerning the validity of the relations between each predictor and the described variables, the hierarchical multiple regression analysis was applied. This will enable showing the possibilities of predicting job satisfaction among academic teachers based on their explicit attitudes towards work in the presence of variables such as *social capital*, *the atmosphere at work* and *seniority*.

3.2. Work Attitudes and the Satisfaction with Teaching

Preliminary analysis showed that satisfaction with teaching strongly correlates with the normative and autotelic attitudes towards work and poorly with social capital and atmosphere at work (and also very poorly and negatively with seniority). Therefore, the variables that correlate with satisfaction with teaching were hierarchically introduced into the model. However, only the first two models presented in Table 3 showed any significance due to the changes.

Both the first model with a single predictor (normative attitude) and the model with two predictors, additionally comprising autotelic attitudes towards work, have proved to be well matched, and significant at $p < 0.001$. Analysis of variance for the first model is $F(1.365) = 144.28$, and for the second model - $F(2.364) = 123.64$. The first model explains 28% of the variance of the sense of satisfaction with teaching. Introducing a second predictor resulted in an increase of the proportion of the explained variance up to 40%. The F change test proved to be significant, and the standard error of estimate was further reduced (see Table 2). The introduction of further predictors, such as social capital, work atmosphere and seniority, did not significantly increase the proportion of the explained variance (although it is worth noting that it also did not increase the error of estimate). These data show that satisfaction with teaching to a large extent can be explained with the help of normative attitudes to work, but examining these attitudes together with autotelic attitudes significantly increases the ability to predict the level of satisfaction with teaching, which will be the subject to a broader interpretation in the discussion part of the paper.

3.3. Work Attitudes and Job Satisfaction with Research Work

Further analyses concern linear relationships between the discussed predictors and the variable defined as the *satisfaction with research work*. In this regard, it has been shown based on preliminary analyses that job satisfaction with research work does, very weakly though, correlate with the autotelic and normative attitudes towards work and very weakly and negatively with seniority. The results of hierarchical regression analysis for these variables used to explain the categorical variable of *job satisfaction with research work* are presented in Table 4.

Both the model with one predictor (autotelic attitude) and a model with two and three predictors proved to be well matched (model I: $F(1.365) = 28.04$, $p < 0.001$; Model II: $F(2.364) = 15.77$, 11 , $p < 0.001$). Autotelic attitudes themselves explain, however, only 7% of the variance in job satisfaction with research work. Adding another predictor in the form of normative attitudes increases the proportion of the explained variance up to 8%. The F change proved to be irrelevant, as well as standard error of the estimate did not diminish. One could thus say that the satisfaction of research achievements may be to a small but significant extent explained by the autotelic attitude towards work. Analysing the impact of autotelic attitudes together with normative attitudes does not allow to significantly increase the prediction of the level of satisfaction with research, although the same normative attitudes positively correlate with research satisfaction at the level $R = 0.28$. Adding another variable, weakly and negatively correlating with research satisfaction (see Table 1) – *seniority*, did not significantly increase the level of the explained variance. It can, therefore, be concluded that job satisfaction with research work can be explained with the help of autotelic attitudes towards work, regardless of the presence of normative attitudes and variables such as: the atmosphere at work, social capital at work and seniority.

3.4. Work Attitudes and Job Satisfaction with Organizational Work

The last analysed dimension of job satisfaction of university teachers is an attempt to present the possibility of predicting subjective sense of satisfaction with organizational work for the university. The analysis of linear relations presented in Table 2 showed a very weak correlation between job satisfaction with organizational work and work attitudes. The described categorical variable turned out to be moderately positively correlated, while social capital and atmosphere at work and weakly with seniority. The resulting data are presented in Table 5.

Multiple linear regression analysis confirmed a good match of both models with high significance $F_{pp} < 0.001$ (model I: $F(1.365) = 70.83$; Model II: $F(2.364) = 41.34$). It has been shown that satisfaction with organizational work can indeed be explained both by social capital at the workplace alone, and together with the atmosphere at work. Social capital alone explains 16% of the variance in job satisfaction with organizational work, while with atmosphere at work the proportion of the explained variance increases up to 18%. This change is statistically significant at $p < 0.01$. Adding another predictor of seniority does not increase the level of the explained variance but increases the estimation error.

4. Discussion of Results

In the light of the presented research results, we can conclude that:

1. Academic teachers in Poland rather negatively assess the level of social support received in the workplace, which means that they perceive the relationships in the workplace as devoid of transparent decision-making processes, responsible leadership, trust, solidarity and cooperation between members of the institution, they also have a sense of unfair treatment and lack of influence on decisions concerning them.
2. The level of subjective feeling of job satisfaction among academic teachers varies according to the kind of satisfaction. Teachers are most satisfied with their research work and teaching, and the least satisfied with organizational work for their workplace. The probable cause of this fact is a very positive opinion about the atmosphere at work and low level of social support in the workplace. It seems that the research work brings greater satisfaction because of the personal benefits of its performance and a high level of autonomy in terms of scientific development. Teaching can provide more satisfaction thanks to a relative autonomy in its implementation (although in this respect the autonomy is being significantly reduced) and positive feedback from students. At the same time, organizational work gives the greatest benefits only to the institution, and with no feeling of support, lack of autonomy and or positive reinforcement (appreciation by the supervisor, praise, rewards) only very slightly contributes to the achievement of satisfaction.
3. Factors letting explain job satisfaction of an academic teacher vary according to the kind of satisfaction we study. And so:
 - a) *Satisfaction with teaching* can be effectively explained by normative attitudes to work, but examining these attitudes together with autotelic attitudes significantly increases the possibility to predict its level. It means that: the higher the level of the perception of work as an activity beneficial for the society is and the more work is treated as pleasure, the higher the level of satisfaction with teaching students is.
 - b) *Satisfaction with research work* is to the greatest extent explained with autotelic attitudes towards work, which means that the more work is seen as an enjoyable activity and an opportunity for self-development, the greater job satisfaction with research among teachers, while the more work is treated only as economic need, the weaker the satisfaction teachers with doing research is. The pleasure of working explains the level of satisfaction with scientific development regardless of the level of social support received and atmosphere at work, and even regardless of perceiving work as an activity beneficial for the society.
 - c) In contrast to the two previous areas of job satisfaction, *job satisfaction with organizational work* cannot be explained with the help of work attitudes presented by teachers. Satisfaction turned out to be independent of the global perception of personal and social significance of work. It was also shown that satisfaction with organizational work for the university is to the greatest extent explained by the social capital in the workplace, taken together with atmosphere of work. It means that the less care and activity in supporting the employees shown by the management and the less positive interactions between people in the workplace (both in contact with superiors and colleagues) there are, the less satisfaction with work for the university as an organization feel the teachers. Work attitudes did not appear to be of a greater importance in this matter.

The conclusions from the research presented above only to some extent confirm the assumed hypotheses. As expected, job satisfaction of academic teachers to a greater extent can be explained by their work attitudes than by the social support they receive or by the atmosphere at work. It turned out, however, that this only applies to job satisfaction with teaching and research. In the case of organizational work, the level of satisfaction with its performance to a greater extent depends on the interpersonal relationships in the workplace.

This, hypothetically unexpected pattern of results clearly revealed contemporary changes taking place at universities in Poland as well as the ambiguity and multi- functionality of the teacher's role, or the category of "impossible professions" described by Kwiatkowski (2008, p. 28).

It seems that the professional identity of academic teachers today is still built on didactic work and research, which are associated with a sense of success and its subjective perception, that is job satisfaction. Management tasks, marketing, office and administration, as well as changes in the curriculum, regarded as not very sensible but depriving of autonomy, are not related to pleasure, sense of self-fulfilment or job satisfaction.

In relation to previous research it can be concluded that the areas connected with a sense of vocation and passion for work are related to job satisfaction of an academic teacher in Poland (Berg, Grant, Johnson, 2010; Dobrow, Tosti-Kharas, 2011, Duffy and others, 2012; Hirschi, 2012). Only those work areas that turn out to be important personally or socially lead to greater satisfaction with work (teaching and research). But no control over the activities and lack of proper social interaction in the workplace do not make work attitudes factors of satisfaction with work (Armstrong, 2000, p. 121).

As demonstrated by Linda Evans (after: Wilkomirska, 2002, p. 95), job satisfaction is conditioned by the sense of achievement at work. In the light of the presented research results, we can therefore assume that organizational work does not give an academic teacher a sense of professional achievements, and the satisfaction of performing it is smaller the less satisfactory the atmosphere at the university is and the less social support teacher receives in the workplace.

5. Limitations of Work and Direction for Further Research

The research has shown a so far little explored phenomenon of distinguishing the level of job satisfaction depending on the area of work. It turned out that working for an institution, to a small extent is treated by Polish academics as a possible source of satisfaction. It seems that the objective of further research in this area should be to diagnose organizational commitment presented by teachers in relation to the university as a place of work. While the research and educational work seems to be done with passion and turned out to be dependent on the general work attitudes (which confirms previous research reports), work for the institution itself does not constitute a source of satisfaction for Polish academic teachers. The major limitation of the presented research is, however, its correlative nature, which does not allow drawing unambiguous conclusions about the directions of the presented dependencies, as well as a limited number of respondents who agreed to participate in the study. Research on the whole country and comparing the results in an international context are worth expanding.

Table 1: Descriptive Statistics

| N = 367 | Satisfaction with teaching | Satisfaction with research | Satisfaction organization | withAutotelic attitudes | Normative attitudes | Social capital | Atmosphere at work |
|---------|----------------------------|----------------------------|---------------------------|-------------------------|---------------------|----------------|--------------------|
| M | 5.16 | 5.45 | 4.93 | 25.67 | 25.54 | 22.09 | 3.79 |
| Do | 5 | 5 | 4 | 27 | 27 | 21 | 4 |

Table 2: Correlations between Variables

| Variable | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|-----------------------------------|---------|---------|---------|---------|--------|------|------|----|
| 1. Autotelic work attitudes | - | | | | | | | |
| 2. Normative work attitudes | 0.21* | - | | | | | | |
| 3. Social capital at work | 0.29* | 0.22* | - | | | | | |
| 4. Atmosphere at work | 0.26* | 0.31** | 0.43** | - | | | | |
| 5. Seniority | 0.01 | 0.02 | -0.04 | 0.12 | - | | | |
| 6. Satisfaction with teaching | 0.51*** | 0.53*** | 0.34*** | 0.20** | -0.11* | - | | |
| 7. Satisfaction with research | 0.27*** | 0.14** | 0.10 | 0.10 | -0.10* | 0.04 | - | |
| 8. Satisfaction with organization | 0.14* | 0.12* | 0.40*** | 0.35*** | 0.17* | 0.03 | 0.05 | - |

Notes: N = 367; * p<0.05; ** p<0.01; *** p<0.001 (two-sided)

Table 3: Results of Hierarchical Regression Analysis, the Criterion Variable – Satisfaction with Teaching (N = 367)

| Predictors | $\Delta R2$ | $\beta 1$ | SE |
|----------------------------|-------------|-----------|----------|
| Model 1 | 0.28*** | | |
| <i>Normative attitudes</i> | | 0.10 | 0.009*** |
| Model 2 (full model) | 0.40*** | | |
| <i>Normative attitudes</i> | | 0.07 | 0.007*** |
| <i>Autotelic attitudes</i> | | 0.06 | 0.07 |

Notes: $\Delta R2$ = adjusted R2 - coefficient of determination; $\beta 1$ = standardized directional factor, SE = standard error of estimate

*significance at p<0.05; ** significance at p<0.01; *** significance at p<0.001; factor devoid of markings is not statistically significant

Table 4: Results of Hierarchical Regression Analysis, the Criterion Variable – Job Satisfaction with Scientific Work (N = 367)

| Predictors | $\Delta R2$ | $\beta 1$ | SE |
|----------------------------|-------------|-----------|----------|
| Model 1 | 0.069*** | | |
| <i>Autotelic attitudes</i> | | 0.28 | 0.05 *** |
| Model 2 (full model) | 0.075 | | |
| <i>Autotelic attitudes</i> | | 0.26 | 0.05 *** |
| <i>Normative attitudes</i> | | 0.02 | 0.01 |

Notes: $\Delta R2$ = adjusted R2 - coefficient of determination; $\beta 1$ = standardized directional factor, SE = error estimate

* significance at p <0.05; ** significance at p <0.01; *** significance at p <0.001; factor devoid of markings is not statistically significant

Table 5: Results of Hierarchical Regression Analysis for the Criterion Variable – Job Satisfaction with Organizational Work (N = 367)

| Predictors | $\Delta R2$ | $\beta 1$ | SE |
|---------------------------|-------------|-----------|----------|
| Model 1 | 0.16 *** | | |
| <i>Social capital</i> | | 0.16 | 0.09 *** |
| Model 2 (full model) | 0.18 ** | | |
| <i>Social capital</i> | | 0.12 | 0.02 *** |
| <i>Atmosphere at work</i> | | 0.08 | 0.02 ** |

Notes: $\Delta R2$ = adjusted R2 - coefficient of determination; $\beta 1$ = standardized directional factor, SE = error of estimate

* significance p <0.05; ** significance at p <0.01; *** significance at p <0.001

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