

DETERMINANTS OF ACADEMICS' JOB SATISFACTION: EXAMINING THE PERSPECTIVE OF ACADEMIC STAFF

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ABSTRACT: The job satisfaction of academic staff is influenced by several variables with intricate functions, such as work intensity, quality of working time, working conditions, employee motivation, and career development prospects. This study aims to investigate the impact of factors contributing to enhanced job satisfaction of academic staff in Romania, with a specific focus on research, development, and innovation activities. A conceptual model of job satisfaction was developed based on the nine dimensions identified in the literature, and it was applied to the selected target group. The study utilized a convenience or availability-based sampling method, and 17 semi-structured research interviews were conducted with respondents from diverse research fields. The interview guide included questions that were focused on the dimensions studied. Analysis of the interview data revealed that three factors, namely Research recognition and value, Efficient management, and Work incentives, were significant contributors to academic staff job satisfaction. Therefore, it is recommended that academic management should concentrate on these areas of human resource management to enhance academic staff job satisfaction and employee retention. This study provides valuable insights into employee strategies and satisfaction practices that could assist university management in improving overall job satisfaction.

KEYWORDS: job resources, qualitative research, academic satisfaction.

1. INTRODUCTION

In the current economic landscape, organizations rely on various resources, with human resources playing a critical role in their management strategy. Effective management of human resources requires a distinct approach that aims to maintain a skilled and committed workforce while ensuring high-quality and productive work.

In Romania, improving the quality of research, development, and innovation presents a significant challenge. While there are various approaches to enhance quality, this study focuses on human resource management in academia and its relationship with job satisfaction. Given the global emphasis on human resources, this article seeks to examine multiple dimensions of work quality, which are briefly introduced in the following section and analyzed in different sectors of research, development, and innovation.

2. LITERATURE REVIEW

The purpose of this section is to summarize the findings of extensive studies conducted at the European level, which have also informed the research approach adopted in this study. The performance of researchers, whether in the public or private sector, is critical in shaping the pace of innovation and development, making their

effectiveness vital for sustainable development and attracting the attention of policymakers, governments, and academic institutions [1].

The literature analysis on job satisfaction examined several indicators, including intellectual satisfaction, remuneration, benefits, opportunities for career advancement, prospects for mobility, job security, social status, dynamism, contribution to society, level of independence, employer reputation, degree of responsibility, and job location. Among the various dimensions investigated in the literature, the compensation package is considered the most significant factor influencing job satisfaction for employees across different organizations [2].

Previous research on job satisfaction in academia has utilized a comparable two-stage framework [3], incorporating Herzberg's dual-factor theory of motivators and hygiene factors that affect job satisfaction.

The European assessment of job quality covers various indicators, which are further analyzed in this report. These indicators include work intensity, quality of working time, physical and social environmental characteristics, remuneration conditions, career advancement opportunities, as well as incentives and rewards.

1. The dimension of recruitment and selection has been widely studied in academic literature,

institutional culture, and policy, and has been found to have a substantial influence on job satisfaction. Research has shown that the recruitment and selection process can significantly impact the attitudes and behaviors of new employees, ultimately influencing their job satisfaction and overall job performance. Therefore, organizations must pay close attention to their recruitment and selection procedures to ensure that they are effective and align with their human resource management strategies, which will ultimately impact job satisfaction levels.

2. The dimension of quality assessment has become increasingly significant in the European Research Area (ERA), as a majority of EU member states have implemented performance-based funding mechanisms to improve the effectiveness of their public research systems, which is a key priority of the ERA. Evaluation systems at both European and global levels primarily emphasize scientific productivity, which relates to the production and progression of scientific knowledge, technological productivity, and societal impact.

3. Correct, work intensity can have various implications on an individual's work and overall well-being [4]. It can lead to increased stress levels, burnout, and a negative impact on work-life balance. Managing work intensity and promoting a healthy work environment are critical for ensuring the well-being and job satisfaction of employees. Policies and strategies that prioritize the distribution of workload, time management, and employee support can help mitigate the negative effects of work intensity.

The report by Boisard [5] identifies five organizational factors that have an impact on work intensity, which are as follows:

- Technological factors that are associated with the rate of operation of equipment or the speed of movement of products in the technological process;
- Normative factors that are related to the existence of numerical or quality work rules;
- Hierarchical factors that are linked to the direct control of a supervisor;
- Horizontal factors that pertain to the potential activities carried out by colleagues; and
- Interaction factors that are associated with direct requests from customers, consumers, and users.

4. The quality of working time is assessed using the Working Time Quality Index, which comprises four dimensions, including duration, atypical working time, working time arrangements, and flexibility. Numerous studies have linked extended working hours, shift work, and night work with negative

impacts on an individual's health and well-being, such as an increased risk of cardiovascular disease [6], depressive symptoms [7], musculoskeletal disorders [8], fatigue, reduced sleep quantity and quality, anxiety, depression, gastrointestinal disorders, miscarriage, premature birth, and cancer [9]. The Sixth European Working Conditions Survey Report [10] highlights the quality of working time in the EU28 and suggests that employees generally have better quality working time than self-employed workers, in part due to the Working Time Directive that limits long working hours. Possible solutions to improve working time quality include implementing a shorter working week, extending working time, and providing adequate daily rest periods.

5. Size Working conditions. In 2015, a Job Satisfaction Index analysis was conducted in Denmark [11] to determine the factors that contribute to job satisfaction. Six factors, including job purpose, leadership, opportunity to participate in decisions, achievement, work-life balance, and relationship with colleagues, were analyzed quantitatively, with each factor carrying a specific weight. The results indicated that job purpose had the highest weight, followed by leadership, and the lowest weight was given to the relationship with colleagues. In 2017, a similar analysis was conducted, with the addition of "competence," an individual's ability to cope with tasks, and a weighted average of seven factors was used.

6. Dimension Motivation system (salary and incentives). The literature identifies various staff motivation systems aimed at increasing employee satisfaction and promoting effective employee engagement in their work activities [12].

Reward.

When employees believe that their efficient work will be adequately rewarded, they are more likely to actively contribute to the completion of assigned tasks [13]. The dimension of the motivation system that involves salary and incentives is particularly critical in this regard.

Monetary rewards. Salary. Monetary rewards, specifically in the form of wages, are widely regarded as one of the most significant incentives for employees, as it serves as the primary means of fulfilling their needs, as described in Maslow's hierarchy of needs. These needs include fulfilling physiological needs like purchasing food, security needs such as housing, and fulfilling esteem needs [12]. A study was conducted in 2012 at the European level to evaluate the satisfaction of researchers by using primary indicators of research staff motivation. The results of the study revealed the situation in Romania, as shown in Figure 1:

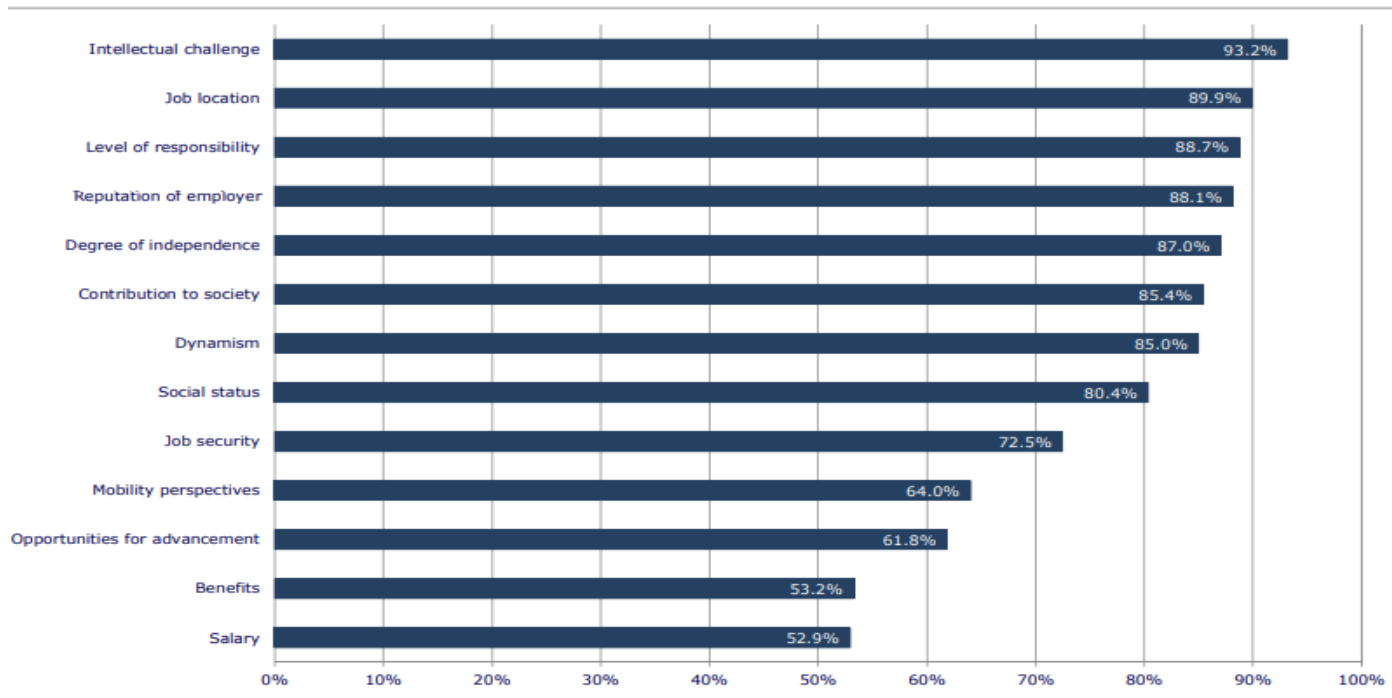


Figure 1. Degree of satisfaction with different aspects of the current academic position (EU27) (Sources: [15])

7. The Career Development Dimension is a critical aspect of research careers, and a recent publication from 2017 provides insight into the evolution of the research, development, and innovation sector in higher education institutions in the United Kingdom over the past decade. This report includes a comprehensive analysis of the management and executive sectors, which is also incorporated into this review. The UK has placed a significant emphasis on job satisfaction, as evidenced by measures aimed at integrating new entrants into the workforce. However, a comparison with previous surveys indicates a slight decline in job satisfaction since 2013. The report highlights concerns over inequality and unfairness in the workplace, which can lead to insecurity and dissatisfaction.

In the European context, and specifically in Romania, this report aims to provide a contemporary analysis of the factors that influence job satisfaction among executive and managerial personnel in research, development, and innovation fields. The goal is to identify areas that can be improved through future strategies. A conceptual model of job satisfaction is formulated based on the seven dimensions identified in the literature, as outlined in Figure 2, and applied in this study.



Figure 2. Conceptual model of job satisfaction in this study (Sources: Authors own elaboration)

Aim and objectives of the research

The aim of this research was to investigate the factors that affect job satisfaction in academic work. Specific objectives were derived as follows: (O1) to identify the factors that predict job satisfaction in academic work; (O2) to evaluate how these identified factors influence job satisfaction among employees of higher education institutions in Romania; (O3) to examine whether there are differences in perceptions of the factors affecting job satisfaction based on the nature of the position held (managerial or executive); and (O4) to determine potential ways to improve work efficiency, increase job satisfaction, and enhance working conditions within the academic community. The research utilized a qualitative approach, which seeks to comprehend the beliefs, experiences, attitudes, behaviors, and interactions of individuals. This approach was chosen as the initial step in

identifying the factors that predict job satisfaction. The research was conducted in three stages: (1) a preliminary stage involving a pilot study, (2) a data collection stage comprising of interviews, and (3) an in-depth analysis and refinement stage of the findings.

3. RESEARCH METHODOLOGY

In this study, the reference population under consideration consists of individuals who are formally engaged in research activities. To obtain in-depth information from decision-makers who hold direct roles in managing human resources related to research, development, and innovation, individual interviews were deemed appropriate. The research objective was to explore the relevance of the conceptual framework by conducting qualitative, semi-structured interviews, and to identify avenues for improving the variable under investigation. Semi-structured, semi-directive interviews were conducted based on an interview guide that contained the topics to be covered in the discussion. A list of no more than five to six topics was initially established, and for each topic, specific areas to be discussed were determined. The study initially developed interview guides for both management and executive staff. Data collection was carried out through project number 8PS Advanced Techniques to Boost Performance in Research Careers and was re-analyzed for the current study.

Sample investigated – selection and characteristics

Seventeen interviews were conducted with individuals in senior positions across various research organizations, representing diverse fields including mechanics, energy, cell and molecular biology, electrical engineering, hydraulics, turbo motors, biomedical, mechatronics, nanotechnologies, health, labor protection, textiles and clothing, and acoustics. These respondents hold management positions within their respective organizations and possess specialized expertise in the field of their organization's operation. The duration of their management experience ranges from 1 year to over 25 years. Some respondents also have prior work experience in other sectors, such as the government or the private sector, and hold positions in various committees and structures related to research, development, and innovation.

To begin each interview, the administering researcher introduced the interviewee to the purpose and objectives of the research and the institution conducting the study. The administering researchers coordinated with the respondents in advance to arrange a mutually agreeable time and location for the

interview. All responses from the interviewees were recorded accurately, and identifying data were removed from the transcript. Each respondent was assigned an identification number, and the responses were centralized to facilitate subsequent analysis.

Data collection tools

The interview guide employed in this research was developed as part of the project number 8PS Advanced Techniques to Boost Performance in Research Careers. The first section of the interview guide serves as an introduction and enables a smooth transition into the discussion. This section also seeks to gather information about the respondent's position within their organization, the field in which they work, and their past experiences working in other fields. The focus of this section is on the respondent and their experiences.

Following the introductory section, the interview guide is structured around the human resource management process in research, development, and innovation. This process includes topics such as hiring researchers, evaluating professional performance, and effectively managing human resources in the field. The interview guide is organized to facilitate a logical flow of discussion and to ensure that all relevant topics are covered.

Finally, the interview guide concludes by requesting recommendations from respondents regarding potential improvements to the field of research, development, and innovation. The overall structure of the interview guide was designed to gather valuable insights and perspectives from senior professionals with extensive experience in managing human resources in research, development, and innovation.

3. RESEARCH RESULTS

The findings of the 17 interviews conducted for this study are summarized below, with responses categorized thematically. The study analyzed seven dimensions in accordance with its objectives, identified three factors that predict job satisfaction, and assessed the nature of the influence of these factors.

Size Research recognition and value

The first dimension, research recognition and value, revealed that the evaluation mechanisms used in research institutes are largely similar. Professional performance is evaluated based on scientometric indices such as the number of articles in various categories, citations, patents, medals, participation in conferences and symposia, projects won, project team

membership, and technology transfer. Research staff complete individual evaluation sheets and an activity report. Some respondents noted the existence of internal competitions for staff in the research area, where the best researchers are recognized and awarded. The inclusion of aspects related to the relationship with the private sector or technology transfer in the individual evaluation is often mentioned. However, respondents have varying opinions on the usefulness of evaluation criteria and tools.

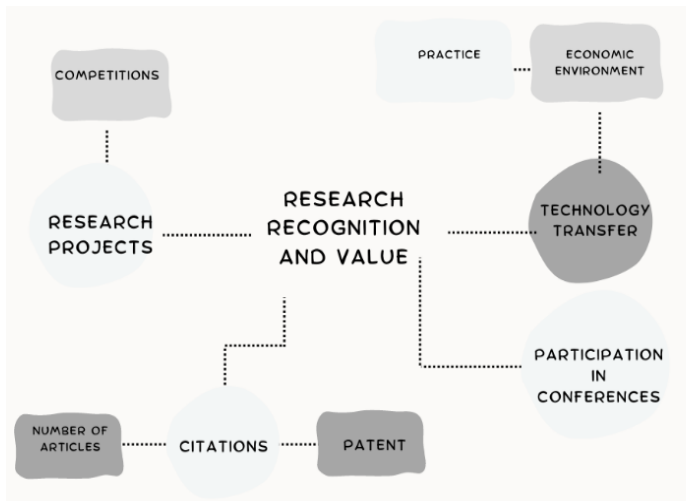


Figure 3. Scientometric indices resulting from the research (Sources: Authors' own elaboration)

Size Efficient management

As per the interviews conducted, the respondents highlighted the importance of domain knowledge for a good manager in academia. It was noted that a competent research manager has a significant financial responsibility towards the researchers and the institute. They need to ensure a stable source of income for research activities by attracting funds and identifying projects that generate additional income for the organization.

Moreover, a good manager should possess a vision, a sound development strategy, and be receptive to new ideas. Effective human resource management was also considered a crucial aspect of an R&D/innovation manager's role. A manager must understand the strengths and weaknesses of each team member. Researchers expect their coordinators to handle financial issues and secure consistent funding sources. Fair management practices can compensate for potential discrepancies between fields in terms of advancement criteria.

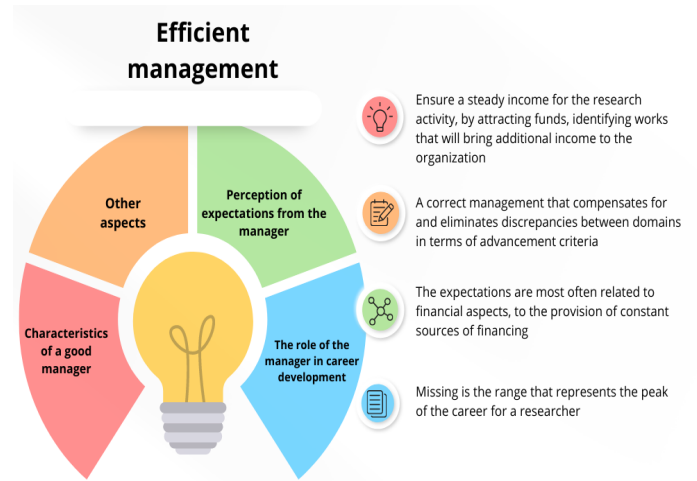


Figure 4. Profile of effective management resulting from the research (Sources: Authors own elaboration)

Size Work Incentives

It seems that incentives for researchers who perform above average are not yet widely implemented in academia, and some respondents suggest that the lack of such incentives could lead to low interest in research activity and staff retention. Respondents also suggest the introduction of non-financial incentives, such as program flexibility, medals, modification of seniority requirements in special cases, and participation in refresher courses. These non-financial incentives could potentially provide additional motivation to researchers and enhance their job satisfaction.

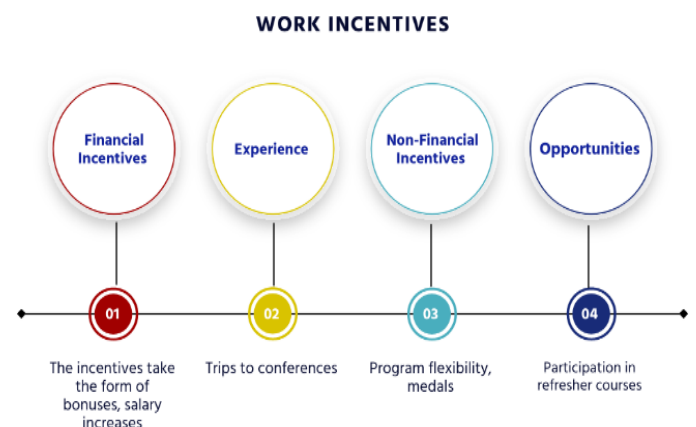


Figure 5. Identification of positive impact incentives resulting from the research (Sources: Authors own elaboration)

Discussion

Employee strategies and practices for job satisfaction.

One common objective expressed by senior managers in interviews is to establish predictability in R&D and innovation competitions. In fact, predictability emerged as the most frequently mentioned term in the responses solicited on improving R&D and innovation efforts. Respondents identified lack of

predictability (e.g., changes in timing and conditions of research competitions) and inadequate funding as the primary challenges. Other recommendations offered by respondents relate to legislation (e.g., greater freedom in hiring), closer collaboration with the private sector, quality-based evaluation, enhanced evaluation processes for projects submitted to research competitions, and wider dissemination of research results to the general public. In comparison to those in executive roles, a greater proportion of managers regard peer support as a positive influence on both job satisfaction and job performance. During interviews, R&D and innovation managers emphasized the significance of integrating new employees into their teams and recognized that individuals who work collaboratively with others often achieve better outcomes, such as publishing more articles, obtaining more patents, and participating in more projects. This finding may account for the slight disparity in ratings regarding the impact of peer support on job satisfaction and job performance between the two categories of respondents. Respondents generally view citations of their contributions in different publications (such as WoS-indexed journals with or without impact factor, BDI-indexed journals, and others) as having a more substantial positive influence on satisfaction than on performance. This observation explains why interviews highlighted that individual researchers' performance is acknowledged by the scientific community through WoS citations of publications, which in itself acts as an incentive to improve research performance. Of all the incentives examined in this study, financial incentives had the most positive effect on both performance and satisfaction, and the managers interviewed in the qualitative research emphasized their essentiality. In-depth interviews with management respondents also revealed that providing flexibility in working hours is another incentive that may be offered as a reward for those who perform well in R&D and innovation.

4. CONCLUSIONS

The aim of this research was to investigate the factors that influence job satisfaction, specifically within the context of research, development, and innovation (RD&I) in Romania. The study's results indicate that recruitment and selection, job pay and salary, career development, work incentives, participation in research projects and teams, and recognition and value are highly interrelated and positively correlated with a higher-order construct named research outcomes. System factors, such as recruitment and selection, job pay, and salary, predict institutional factors of research performance positively.

Institutional factors, such as career development and work incentives, predict individual factors of research performance positively. The models proposed in this study emphasize the significance of career development, research leadership, and co-career in national and institutional research policies. These models also provide a foundation for research entities to design their internal policies to support a sustainable research culture that goes beyond participation in research projects and teams and researchers' pay. Furthermore, these models may be beneficial for evaluating individual researchers in the context of career advancement. Therefore, it can be concluded that academic institutions must take an active role and demonstrate a strong commitment to support their researchers in their career development and choices throughout their careers.

Limitations of the study

It is essential to acknowledge the limitations of the sample and sampling techniques employed in this study when interpreting the results. While all public research entities in the country were invited to participate in the survey, the authors had no control over how the survey was disseminated within the institutions.

Moreover, this research only has a predictive function in the absence of quantitative research and serves as a reference point for future studies. It is crucial to recognize that although the models were consistent with the empirical data and provided a coherent theoretical framework, there may be other models that fit the data just as well.

In conclusion, this study represents a significant advancement in understanding employee satisfaction at universities in Romania and beyond. The paper's primary contributions are two-fold. Firstly, it proposes a framework for conceptualizing and implementing relevant practices that promote a sustainable, multi-dimensional approach to research performance. Secondly, future studies could explore formative models of employee satisfaction and investigate how to link them across different work domains.

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