



RESEARCH MANAGEMENT COMPETENCIES: CROATIAN ACADEMICS' PERSPECTIVE

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Presentation plan

- 1. (Broader) research context
- Changes in the academic profession, academics' roles and competencies
- 3. Research methodology
- 4. Research results and discussion
- 5. Summary, open questions and conclusions





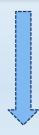


(Broader) research context

APROFRAME project/ research; Academic Profession

Competencies Profile: Between new Requirements and

Possibilities



What are the competencies academics need at the begining of their senior academic career?







Changes in the academic profession, academics' roles and competencies

Changes in the academic profession

(Enders, 1999; Honan, Teferra, 2001; Kovač, Ledić and Rafajac, 2002; Altbach, 2006; Kogan and Teichler, 2007; Cummings, 2008; Pedro, 2009; Scott, 2009; Ledić, 2012; Turk and Ledić, 2014; Turk 2015a, 2015b; Turk and Ledić, 2016)

Appearance of new and restructuring of existing jobs;
Meeting new demands and performing new activities
(Musselin, 2007)

Demands for new, and redefining the existing competencies

Teaching and research - part of a broader range of activities

Development of research management as the *sine qua non* direction of the researchers' career development in the future (Musselin, 2007; Rončević, & Rafajac, 2012; Kehm, & Teichler, 2013; Turk, 2015, 2016) Manager-academic as the bearer of changes, initiator of reforms and new activities (Deem, 2001)







Research methodology (1/2)

QUANTITATIVE RESEARCH

Examine the attitudes of Croatian academics on the importance and mastery of academic profession competencies for successful accomplishment of academic tasks at the begining of their senior academic career







Research methodology (2/2)

QUANTITATIVE RESEARCH

Variables

Sample

Procedures and instruments for collecting data

Data processing

- Research field
- Organizational form of the university
- Academic position
- Sex
- Age

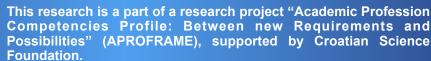
- •1130 research participants
- 7 Croatian universities

- On-line survey
- Survey questionnaire
- 45 items competencies of the academic profession
- Likert scale

- Statistical Package for the Social Sciences (SPSS, 20.0.)
- univariate, bivariate and multivariate statistics
- Statistical significance tests, post-hoc tests









Research results and disscusion (1/12)

• Factor analysis results \rightarrow 5 groups/ factors of academic profession competencies

TEACHING COMPETENCIES

- Planning and carrying out teaching
- Applying various methods of teaching harmonized with the learning results
- Setting clear objectives and achieving results in the process of teaching and learning
- Understanding and applying theories on which learning and teaching processes are based
- Applying various procedures of assessment and evaluation of students' success harmonized with the learning results
- Creating an environment that will encourage students to learn
- Applying active learning techniques in the teaching process
- Educating students to be socially responsible and active citizens
- Familiarizing oneself with negotiation and conflict resolution principles
- Familiarizing oneself with ethical principles in teaching and research
- Presentation skills
- Implemementing research findings in teaching







Research results and disscusion (2/12)

RESEARCH MANAGEMENT COMPETENCIES

- Implementing projects which are significant in terms of community's needs
- Familiarizing oneself with program/ project management (writing, applying for and managing programs/projects)
- Managing financial resources of the institution/ department/ course
- Leading teams and individuals
- Familiarizing oneself with financing opportunities for projects in the field of one's own research interest
- Familiarizing oneself with the principles of strategic planning
- Creating and maintaining (international) research networks

THIRD MISSION COMPETENCIES

- •Encouraging students to participate in volunteer programs and programs that contribute to the development of the community
- Cooperating with the civil sector
- •Participating in the volunteer and philanthropic programs and other activities in the community
- •Participating in pubic discussions of general social importance from the professional perspective
- •Adjusting the teaching process to students with special needs
- •Cooperating with the public sector and the economy (institutions and companies from the related field)









Research results and disscusion (3/12)

COMPETENCIES FOR ACADEMIC ADVISING AND INNOVATION

- •Monitoring and advising junior academic colleagues in relation to teaching work
- Introducing changes into syllabus
- Monitoring and advising junior academic colleagues with regard to research work
- •Implementing review procedures in one's own research field
- Creating teaching syllabus
- •Introducing innovations and changes in the work of the institution/ department/ course

RESEARCH DEVELOPMENT COMPETENCIES

- Familiarzing oneself with the basic principles of academic writing and publishing
- Using efficient strategies of critical assessment and literature analysis
- keeping up-to-date with professional development and committing to constant personal growth with regard to basic academic activities
- Working in an interdisciplinary environment







Research results and disscusion (4/12)

RESEARCH MANAGEMENT COMPETENCIES

- Implementing projects which are significant in terms of community's needs
- Familiarizing oneself with program/ project management (writing, applying for and managing programs/projects)
- Managing financial resources of the institution/ department/ course
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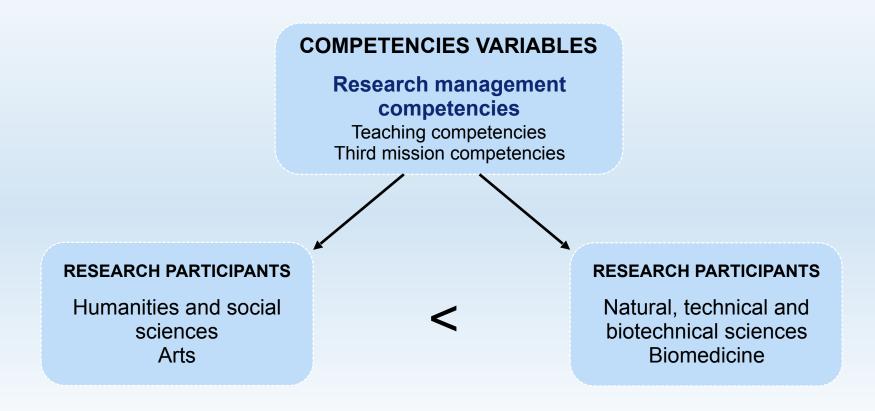






Research results and disscusion (5/12)

Research field → perception of importance





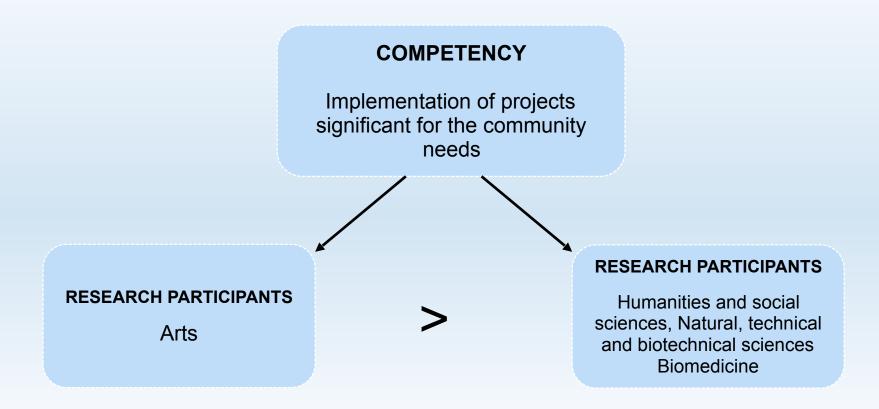






Research results and disscusion (6/12)

Research field → perception of importance



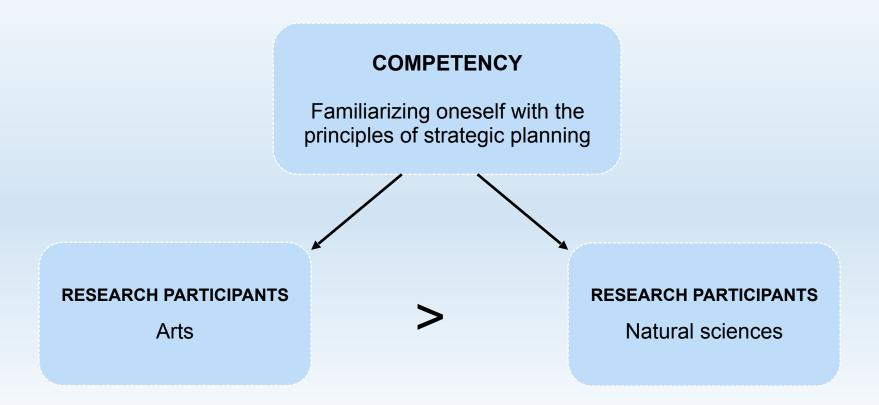






Research results and disscusion (7/12)

Research field → perception of importance









Research results and disscusion (8/12)

Senior academics/ junior academics → perception of importance

COMPETENCIES VARIABLES

Research management competencies

Teaching competencies; Scientific management competencies; Third mission competencies; Advisory and innovatory competencies



RESEARCH PARTICIPANTS

Junior academics



RESEARCH PARTICIPANTS

Senior academics









Research results and disscusion (9/12)

Age → perception of importance

COMPETENCIES VARIABLES

Research management competencies

Teaching competencies;
Scientific management competencies; Third mission competencies; Competencies for academic advising and innovation



RESEARCH PARTICIPANTS

Age 24 – 29

Age 30 - 39

RESEARCH PARTICIPANTS

Age 40 – 49

Age 50 - 59

Age 60 >









Research results and disscusion (10/12)

Academic rank & Age → perception of importance

Junior researchers have a predominantly negative orientation toward the changes within the academic community and are not prepared to accept them







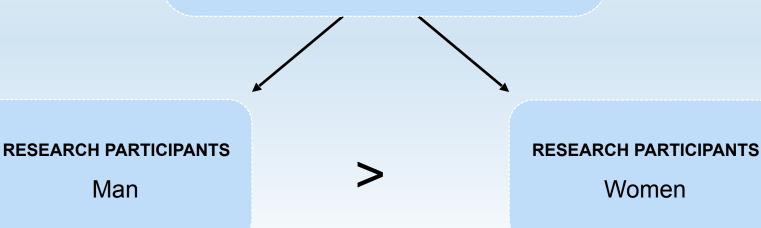
Research results and disscusion (11/12)

Sex → perception of importance

COMPETENCIES VARIABLES

Research management competencies

Teaching competencies; Scientific management competencies; Third mission competencies; Competencies for academic advising and innovation







Man





Research results and disscusion (12/12)

• Seks → perception of importance

"...women teach while men manage." Vrcelj (2014)







Summary, open questions and conclusions (1/3)

- ▶ academics from humanities, social sciences and arts assign statistically significantly lower importance to research management competencies in comparison with the academics from natural, technical and biotechnical sciences and biomedicine
- ▶ junior academics assign statistically significantly lower importance to research management competencies in comparison with the senior academics
- research participants with less working experience (junior researchers) assign statistically significantly lower importance to research management competencies in comparison with the senior ones
- men from the academic comunity assign statistically significantly higher importance to research management competencies in comparison with women







Summary, open questions and conclusions (2/3)

➤ What are the reasons for the differences in the assessment of the research management competencies between the junior and senior academics?

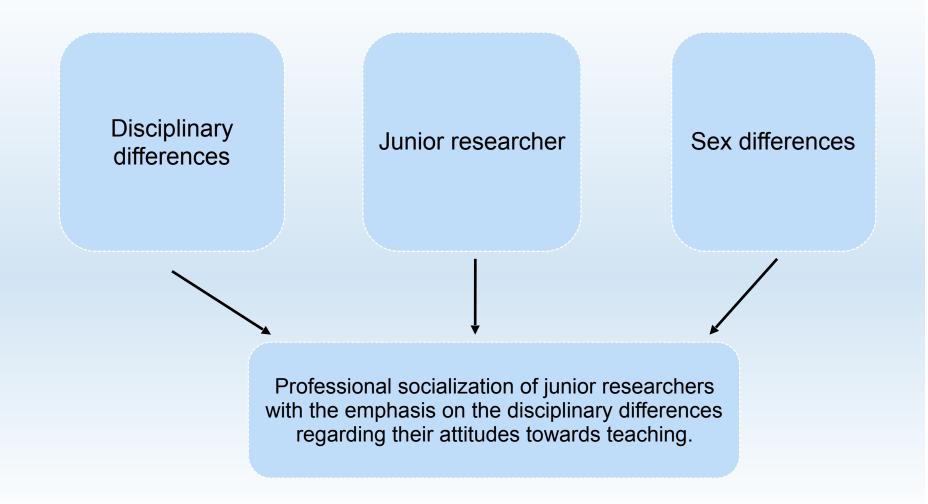
➤ Does the lower assessment of the importance of these competencies point to a weaker motivation for their acquisition?







Summary, open questions and conclusions (3/3)

















Thank you for your attention













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