

Gabriella Pusztai / Klára Kovács (eds.)

Well-Being of Academic Staff in Rapidly Changing Higher Education

**A Focus on Central
and Eastern Europe**

Changes in higher education in recent decades – such as expansion, the Bologna reform, internationalization, competition for students, managerialism, and the emergence of a service-oriented approach – have fundamentally transformed the work of academics. The aim of our research, which forms the basis of this volume and is particularly relevant to the region, was to examine the well-being, working conditions, and performance of academics in five Central and Eastern European countries: Hungary, Slovakia, Ukraine, Romania, and Serbia. This volume consists of two main chapters that present empirical findings based on qualitative and quantitative survey data, as well as national and international statistical databases. The first chapter analyses key higher education indicators from the five countries studied and describes the educational policy environment shaping academic work. The second chapter explores the background factors and effectiveness of academics' work.

Gabriella Pusztai is a professor in educational sociology and director of the Center for Higher Education Research and Development at the University of Debrecen.

Klára Kovács is an associate professor at the University of Debrecen and CHERD researcher, focusing on sports, well-being, and academic performance.

ISBN 978-3-631-93968-0



www.peterlang.com

Well-Being of Academic Staff in Rapidly Changing Higher Education

HIGHER EDUCATION RESEARCH AND POLICY

VOL. 11

Series Editor

Marek Kwiek, Center for Public Policy Studies and UNESCO Chair
in Institutional Research and Higher Education Policy,
University of Poznan, Poland

Editorial Board Members

Daniel C. Levy, Department of Educational Administration and
Policy Studies, State University of New York, Albany, USA

Peter Maassen, Department of Educational Research,
University of Oslo, Norway

Paul Temple, Centre for Higher Education Studies (CHES),
Institute of Education, University of London, London, United Kingdom

Pavel Zgaga, Centre for Educational Policy Studies (CEPS),
Faculty of Education, University of Ljubljana, Slovenia

The *Higher Education Research and Policy* (HERP) series is intended to present both research-oriented studies of higher education systems in transition, especially for comparative international perspectives. Higher education systems worldwide are currently under multi-layered pressures to transform their funding and governance structures in rapidly changing environments. The series intends to explore the impact of such wider social and economic processes as globalization, internationalization and Europeanization on higher education institutions, and is focused on such issues as the changing relationships between the university and the state, the changing academic profession, changes in public funding and university governance, the emergent public/private dynamics in higher education, the consequences of educational expansion, education as public/private goods, and the impact of changing demographics on national systems. Its audience includes higher education researchers and higher education policy analysts, university managers and administrators, as well as national policymakers and the staff of international organizations involved in higher education policymaking.

Gabriella Pusztai / Klára Kovács (eds.)

Well-Being of Academic Staff in Rapidly Changing Higher Education

A Focus on Central and Eastern Europe



PETER LANG

Berlin · Bruxelles · Chennai · Lausanne · New York · Oxford

Bibliographic Information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available online at <http://dnb.d-nb.de>.

Library of Congress Cataloging-in-Publication Data

Names: Pusztai, Gabriella editor | Kovács, Klára editor

Title: Well-being of academic staff in rapidly changing higher education :

a focus on Central and Eastern Europe / Editors: Gabriella Pusztai & Klára Kovács.

Description: New York : Peter Lang, 2026. | Series: Higher education research and policy, 2193-7613 | Includes bibliographical references.

Identifiers: LCCN 2025019772 (print) | LCCN 2025019773 (ebook) |

ISBN 9783631939680 hardback | ISBN 9783631939710 pdf | ISBN 9783631940273 epub

Subjects: LCSH: College teachers--Job satisfaction--Europe, Central |

College teachers--Job satisfaction--Europe, Eastern | Well-being--Europe, Central |

Well-being--Europe, Eastern | Educational change--Europe, Central | Educational

change--Europe, Eastern | Higher education and state--Europe, Central | Higher education

and state--Europe, Eastern | Universities and colleges--Europe, Central--Sociological aspects |

Universities and colleges--Europe, Eastern--Sociological aspects

Classification: LCC LB2331.74.E8515 W45 2025 (print) | LCC LB2331.74.E8515 (ebook) |

DDC 378.1/20943--dc23/eng/20250605

LC record available at <https://lccn.loc.gov/2025019772>

LC ebook record available at <https://lccn.loc.gov/2025019773>

This publication was financially supported by the University of Debrecen. This research was supported by the project 'Investigating the role of sport and physical activity for a healthy and safe society in the individual and social sustainability of work ability and quality of work and life (multidisciplinary research umbrella program)' and by the János Bolyai Research Scholarship of the Hungarian Academy of Sciences. Project no. TKP2021-EGA-20 has been implemented with the support provided by the Ministry of Culture and Innovation of Hungary from the National Research, Development and Innovation Fund, financed under the TKP2021-EGA funding scheme.

ISSN 2193-7613

ISBN 978-3-631-93968-0 (Print)

ISBN 978-3-631-93971-0 (ePDF)

ISBN 978-3-631-94027-3 (ePUB)

DOI 10.3726/b23030

© 2026 Peter Lang Group AG, Lausanne (Switzerland)

Published by Peter Lang GmbH, Berlin (Germany)

info@peterlang.com

All rights reserved.

All parts of this publication are protected by copyright.

Any utilization outside the strict limits of the copyright law, without the permission of the publisher, is forbidden and liable to prosecution. This applies in particular to reproductions, translations, microfilming, and storage and processing in electronic retrieval systems.

This publication has been peer reviewed.

www.peterlang.com

Reviewers

Irén Gábrity Molnár, Tamás Kozma and Silvia Matúšová

English Proofreader

Johnathan Dabney

Table of Contents

List of Figures	9
List of Tables	13
1. Challenges and Well-Being of Academics on the Eastern Border of the European Union. The Background and Rationale for the Book	17
<i>Gabriella Pusztai & Klára Kovács</i>	
PART I	
Higher Education Systems as the Working Environment of Academic Staff in Central and Eastern Europe: Country Studies	
2. Changes in Higher Education and Academic Staff in Hungary	45
<i>István Polónyi</i>	
3. Higher Education Academics in Slovakia	71
<i>Dana Hanesová, Lenka Rovňanová & Patrícia Zólyomiová</i>	
4. Academics in the Romanian Higher Education Context	105
<i>Imre Tódor</i>	
5. Characteristics of the Higher Education System and Academic Staff in Serbia	145
<i>Elvira Kovács & Zoltán Papp</i>	
6. Challenges in Higher Education and for Academics in Ukraine	177
<i>Katalin Pallay</i>	

PART II

Well-Being of Academics in Central and Eastern Europe

7. Performance Assessment: A New Dimension of Institutional Culture	207
<i>Gabriella Pusztai, Zsuzsanna Demeter-Karászi & Katalin Pallay</i>	
8. (Inclusive) Teaching Practice and Well-Being Among Higher Education Academics in Central and Eastern Europe	231
<i>Anett Hrabéczy & Zsófia Kocsis</i>	
9. International Mobility and Its Impediments for Academics	263
<i>Ilona Dóra Dabney-Fekete, Ágnes Réka Dusa & Katalin Pallay</i>	
10. Research Productivity and Workplace Stress Among Academics	287
<i>Klára Kovács, Marianna Moravetz & Gabriella Hideg</i>	
11. Work-Life Conflicts: A Dual Functionality Approach on Career of Academics	305
<i>Emese Beáta Berei, Ágnes Engler & Klára Kovács</i>	
12. The Cultural Involvement Patterns of Academics	327
<i>Edina Márkus, Judit Herczegh & Márta Miklósi</i>	
13. What Have We Learned About the Well-Being and Performance of Academics in EU Border Region Countries?	347
<i>Klára Kovács & Ilona Dabney-Fekete</i>	
Notes on Contributors	361
Index	363

List of Figures

Figure 2.1	The population aged 18–22 and the number of students and academic staff in Hungarian higher education from the regime change until today	50
Figure 2.2	Gross enrollment rate of higher education in Hungary and the EU and OECD average	51
Figure 2.3	Graduates as a percentage of the population 25–34 years of age	51
Figure 2.4	Development of academic staff and student-academic staff ratio in Hungarian higher education, 1990–2022	53
Figure 2.5	Percentage of women among academic staff in Hungary	54
Figure 2.6	Changes in the number of academic posts in higher education 2000–2020	61
Figure 2.7	Average total monthly earnings of university graduates and academic staff by age (HUF/month) in 2016	63
Figure 2.8	Cumulative lifetime earnings based on 2016 data with a discount rate of 2 percent (million HUF)	64
Figure 3.1	Numbers of HEIs and their faculties in Slovakia	75
Figure 3.2	HE students as % of 20–24 years old in the Visegrád Four countries	76
Figure 3.3	Gross enrollment rate of HE students in Slovakia	77
Figure 3.4	The proportion of HE graduates aged 25–34 (%)—international comparison	78
Figure 3.5	HE students-academic staff ratio 2000–2017 (Slovakia, Hungary, Poland)	81

Figure 3.6	Comparison of the % ratio of enrolled HE students (within 18–34-years-old) in 2000 and in 2017 as well as the % change in the number of academics between 2000 and 2017 (Visegrád Four countries)	82
Figure 3.7	Proportion of females among Academics in HE in the EU/OECD and in Slovakia	85
Figure 3.8	Net flow ratio of internationally mobile students (inbound–outbound), both sexes (%)	92
Figure 3.9	Government expenditure on HE as a percentage of GDP (%)—Visegrád Four and Finland	94
Figure 3.10	International comparison of public expenditure on HE (% of government expenditure on education) 2004–2021	95
Figure 3.11	Academics' compensation as a percentage of total expenditure in public HEIs (%)	96
Figure 4.1	The evolution of the total number and types of Romanian higher education institutions (1990–2023)	110
Figure 4.2	The evolution of the faculties of Romanian higher education institutions (1990–2023)	113
Figure 4.3	Government expenditure on education (% of GDP)—Romania, Hungary, Slovakia	114
Figure 4.4	The evolution of the number of students enrolled in Romanian higher education institutions (1990–2023)	117
Figure 4.5	Ratio of students-to-academic staff, by type of institution (1990–2023)	118
Figure 4.6	Academic staff in higher education institutions, by academic year (1990–2023)	120
Figure 4.7	Academic staff in higher education institutions by macro-regions, development regions, and counties (2022–2023 academic year)	121
Figure 4.8	Female and male academic staff in the Romanian higher education (1990–2023; in percentages)	124
Figure 4.9	Distribution of academic staff in Romania by age groups (2022/2023 academic year)	125
Figure 4.10	Distribution of academic staff in Romania by age groups (2012–2023; in percentage)	126
Figure 4.11	Academic staff in Romanian higher education institutions, by academic rank (2000–2022; in numbers)	127
Figure 4.12	Academic staff in Romanian higher education institutions, by academic rank (2021–2022 academic year; in percentage)	129

Figure 5.1	Serbian higher education system	152
Figure 5.2	Number of academics and associates	155
Figure 5.3	Distribution of academics and associates	155
Figure 5.4	Distribution of male and female academic staff	156
Figure 5.5	Distribution of academic staff by gender and title	157
Figure 5.6	Number of enrolled students vs. the number of academic staff	161
Figure 5.7	Number of students per academic staff/lecturer	162
Figure 5.8	Number of enrolled and graduated students	163
Figure 5.9	Distribution of newly enrolled male and female students	164
Figure 5.10	Distribution of newly enrolled students across Serbia's statistical regions	165
Figure 5.11	The trend of net salary bases in higher education	169
Figure 5.12	Salary comparison of public professionals in Serbia	170
Figure 6.1	Share of population aged 15 and over with tertiary education, by country	180
Figure 6.2	Number of students by field for the academic year 2022/23	186
Figure 6.3	Growth in the number of male students by age group over the past four years	187
Figure 6.4	Number of Ph.D. students in Ukraine from the regime change to the present	189
Figure 6.5	Ph.D. students in Ukraine by age group	189
Figure 6.6	Change in the number of Ukrainian academic staff over the last five years (N)	196
Figure 6.7	Distribution of academic degrees and titles among Ukrainian academics (%)	197
Figure 6.8	Share of women of academic staff in Ukraine and the Visegrád countries	197
Figure 6.9	Average salary of academic staff in Ukraine and Visegrád countries in Euro	198
Figure 10.1	Research productivity of academics over the past four years based on self-report	294
Figure 11.1	The dual functionality of humans at the personal and professional levels (Authors' design)	308
Figure 11.2	Different social environments implication on work-life imbalance (Authors' design)	317
Figure 12.1	Attitudes toward culture by average of responses to attitude questions (N=757-764)	340

List of Tables

Table 2.1	Institutions, faculties, number of students (short-term, tertiary, bachelor, master and undivided, and doctoral) and number of academics	48
Table 2.2	Distribution of academic staff working in higher education by age	53
Table 2.3	Structure of academic staff in Hungarian higher education	61
Table 2.4	Salary ratios of academics' degrees in higher education (Data around 2015–16)	64
Table 2.5	Ranking of countries by world share of doctoral students and number per 100,000 inhabitants	66
Table 3.1	The number of HE students per academic staff in 2020	81
Table 3.2	The changes in numbers of HEIs, their students, and academics in Slovakia (2015–2023)	83
Table 3.3	Age distribution of academic staff/senior staff (OECD and Slovakia)	84
Table 3.4	The age structure of HEI staff in Slovakia—% (2024)	84
Table 3.5	Distribution of academic staff by seniority (% in 2020)	86
Table 3.6	Distribution of academics in HE due to their academic degrees (Between 2003 and 2023, Slovakia)	87
Table 3.7	The salary ratios of academics rank in HE in Slovakia (2022)	97
Table 4.1	Higher educational institutions by macro-regions, development regions, and counties, types (2022/2023 academic year)	112
Table 4.2	The largest higher education centers (2022/2023 academic year)	112

LIST OF TABLES

Table 4.3	The largest higher education centers, by academic staff numbers (2022/2023 academic year)	122
Table 4.4	The largest private higher education centers, by academic staff numbers (2022/2023 academic year)	123
Table 5.1	Number of higher education institutions	159
Table 5.2	Distribution of enrolled students in public and private higher institutions	160
Table 5.3	Distribution of academic staff in public and private higher institutions	160
Table 5.4	Descriptive statistics of students-to-academic staff and students-to-lecturer	162
Table 5.5	The transition from vocational colleges to academies of applied studies	166
Table 5.6	Distribution of higher education institutions	167
Table 5.7	Complexity coefficients for financing the salaries	168
Table 6.1	Higher education institutions and student numbers (Undergraduate, bachelor, master, and postgraduate)	182
Table 7.1	Types of institutional culture and its characteristics	219
Table 7.2	Types of effectiveness and their characteristics	223
Table 7.3	Evaluation of the academic effectiveness of each type of institutional culture	225
Table 8.1	The teaching approach (N=818)	242
Table 8.2	The existence of teacher competencies (N=812)	242
Table 8.3	Types of inclusive teaching activity	244
Table 8.4	The teaching approaches of the academic clusters (N=770, average points)	245
Table 8.5	Types of inclusive teaching activities by academic clusters (N=758, average points)	246
Table 8.6	Interrelations between educational activity and well-being (N=720)	248
Table 9.1	The ratios of academic staff mobility by country (N= 804)	270
Table 9.2	Ratios of teaching and research mobility by academic field (N=800)	271
Table 9.3	Ratios of academic staff mobility by position (N=800)	271
Table 9.4	Ratios of academic staff mobility according to position—the Hungarian and Romanian subsample (N=615)	272

Table 9.5	Ratio of academic staff mobility according to academic degree (N=803)	272
Table 9.6	Ratio of academic staff mobility according to types of academics (N=806)	273
Table 9.7	The connection between education of foreign students and academic staff mobility. $p=0.012$ (N=772)	277
Table 10.1	Correlations of workplace stressors with research productivity (means, SD)	295
Table 11.1	The statistical values of the main components of work-related factors	310
Table 11.2	Perception of the work-life conflict (%) and the principal component factor scores	311
Table 11.3	Differences in the WLC factor by the demographic, family, and professional factors (means on 0–100 points scale)	312
Table 11.4	Multiple stepwise regression analyses. Prediction of WLC	314
Table 12.1	Cultural consumer/leisure types in Hungary from the mid-1980s to the mid-2010s	332
Table 12.2	Frequency of academics' use of cultural and leisure activities by cluster	334
Table 12.3	Frequency of use of cultural and leisure activities (%)	335
Table 12.4	Cluster groups (cluster weights 1–7) and averages of visits to cultural and leisure activities (N=679) based on the frequency of cultural and leisure activities of the academics	337
Table 12.5	Respondents by age group and cultural cluster (N=660)	338
Table 12.6	Distribution of academics by number of books read in the last year (% , persons)	339
Table 12.7	Comparison of cultural clusters with the number of non- or light readers	340
Table 12.8	Means of attitude statements on attitudes toward culture by cultural cluster (1–5 scale)	341

11. Work-Life Conflicts: A Dual Functionality Approach on Career of Academics

Emese Beáta Berei, Ágnes Engler & Klára Kovács

ABSTRACT

Maintaining a harmonious balance between work and personal life (WLB) is a source of strength, it also contributes to optimal professional performance, is associated with higher satisfaction with family life or life in general. At the same time, work-life conflict (WLC) has a negative impact on career of workers which has a large personal, family, institutional and social influence. From now on, the WLC or WLB is much more examined as a predictor of employees' wellbeing or other workplace outcomes as job (in)satisfaction. It is much less clear which factors influence these phenomena and the social evaluation of the balance or confrontation, especially in Central and Eastern Europe. In this study we proposed a holistic view of work-life conflicts, as a clash of human resources and how they are allocated, as a disfunction in both professional and private life at micro and mezzo environments, and we presented a cross-national analysis of academics' WLC. Our main question was three-prong: 1. How do academics balance between professional and personal life? 2. How can we predict conflicts? 3. How can a social evaluation of the conflicts be conducted? As independent factors, we used: age, gender, parenthood, country, working hours, academic job title, emotional exhaustion and social support at work to predict work-life conflicts. The novelty of this study is the social evaluation of the phenomenon: the conceptualization of WLC as a dysfunction at different levels of society. We adopt the dual functionality approach for different social environments: at micro, mezzo, or macro levels. For the quantitative analysis, the sample of academics from five Central and Eastern European countries (Romania, Slovakia, Serbia, Ukraine and Hungary) were used (CEETHE 2023 database, N=821). The complex questionnaire included the measures of WLC score based on Hayman (2005). Statistical analyses performed by using SPSS 29 included ANOVA tests, principal component and factor analysis, and, finally, a multistep linear regression. Results show that more than a third (37%) of academics ignore their personal needs, and a third (33%) perceive that they sacrifice their private life because of work. More than a third of them had difficulty balancing between work and private life (39%), were dissatisfied with the time spent outside the workplace (39%), and nearly half of them (42%) reported missing out on personal activities in their private life due to work. The linear stepwise regression model shows that emotional exhaustion long working hours, less academic job title (low academic positions), the decrease in social supports provided by the institution (at mezzo level) and gender (at micro level) are the significant predictors of WLC. This paper contributes to the work of higher education policy makers on social evaluation of institutional and employee functionality, seeking a better work-life balance in the career of academics.

Keywords: work-life conflict, social evaluation, dual functionality, higher education institutions, academics' career, Central and Eastern European countries

Introduction

In our previous research we examined the sustainability of academic career (Berei et al., 2024) and we highlighted the imbalance between professional and family environments, and the need for its evaluation in academic work. Work-life conflict has a negative impact on academics' well-being (Bell et al., 2012) but it is

much less clear, which factors influence its process and social evaluation. In this paper, we intend to analyze the work-life conflict as a struggle among academics in Hungary, Slovakia, Serbia, Romania and Ukraine to allocate human resources to two different areas. Academics is an occupational category responsible for training people at higher levels in college and universities, working worldwide. Hayman (2005) deemed the conflict of work with the private or family sphere (the dimension examined herein WLC). Work-family (WFC) or WLC is generally discussed from two perspectives: work interference in family, and family interference in work (Allen et al., 2000). Work-life or work-family conflict refers to tension between these two important environments (Premeaux, 2007). In this perspective, WLC occurs when energy, time, or duty demands of works collides with family or personal life. Work-family conflict is a specific form of work-life conflict (Kossek & Lee, 2017). From the perspective of interpersonal conflicts, the WLCs are studied as human confrontation, followed by emotional exhaustion, cynicism, and burnout (Boamah et al., 2022). Organizational interventions are necessary for managing staff anxiety. Participants in these interventions, coming from public, private and non-profit institutions, propose rearrangement of the job sphere the changing of organizational culture, the encouragement of participative management, the introduction of work-life balance policies, as well as improvement of organizational communication (Bhui et al., 2016).

Work-life balance and its loss are a much-studied issue in academic work. The subject has been approached so far from the psychological and organizational management perspective including academics' ability to balance work and personal life and overcome such conflict (Bell et al., 2012; Dorenkamp & Süß, 2017; Johnson et al., 2019). Increased stress levels among employees can also cause institutes within a university to work less efficiently, while tired, discouraged, and undermotivated employees can also have a negative impact on the whole university/college as an organization (Bell et al., 2012). Successfully maintaining a harmonious balance between the two is therefore a source of strength. It also has a positive impact on job satisfaction (Saeed & Farooqi, 2014), contributes to optimal performance (Guest, 2002), and is associated with higher satisfaction with family life and life in general (Sirgy & Lee, 2018). Males had a lower score of the WLC than females (Bell et al., 2012; Mudrak et al., 2018; Chukwuemeka et al., 2023). Studies among females in higher education unanimously concluded they have serious difficulties in reconciling work and family responsibilities (Misra et al., 2012; O'Laughlin & Bischoff, 2005; Paksi et al., 2016). The dilemmas relating to personal life and/or career are most noticeable in the careers of women academics and researchers. If childcare is part of private life, it must be synchronized with work, and still further efforts will be

needed to find a balance for both. For researchers, men and women, working in dangerous environments (laboratories), it is necessary to adapt work-to-family plans, starting with the child planning stage (Paksiand et al., 2022).

This study aims to explore the most important individual and institutional factors, which can affect WLC. Our research questions were as follows: 1. How do academics balance professional and personal life? 2. How can one predict conflicts? 3. How can a person socially evaluate conflicts?

1. The Concept of Social Functionality and Work-Life Conflicts

As for the theoretical background to answer our research questions the concept of social functionality was used. It is rooted in functionalism theory, which views society as a collection of functional micro or mezzo units forming a unitary, functional macro system (Conerly et al., 2021). The concept is currently used in the humanities and social sciences as regards the functionalities and capabilities of vulnerable people. It also addresses the social, medical, and mental health evaluation of individuals, families, and organizations (Sen, 1985; Keltner & Kring, 1998; Greller & Richtermeyer, 2006; Kotwal et al., 2016; Keating et al., 2019; Iamtrakul & Chayphong, 2022; Santana et al. 2022; Giusti et al. 2023; Silva et al. 2023). It pertains to a person's interactions with their environment and their ability to fulfill roles in various circumstances, such as work, social activities, family, and other relationships (Anttila, 2015) with a holistic overview (Pratt et al., 1969). In our study the concept of social functionality refers to the way in which academics in Central and Eastern Europe are able to function (or not) in their families (typically as parents/partners) and at work. The factors herein are explored.

In our study we designed a general strategy of analyses which scrutinizes the work-life conflict as a conflict in the functionality of humans (Fig. 11.1). Its aim is to integrate simultaneously the values, abilities, roles, interactions and social behavior as dual functionalities of individuals at different levels: in private (micro level) and professional environments (national and international institutions, organizations, projects, programs at mezzo or macro levels). At different levels, individuals use different personal and professional abilities, they are involved in different roles and actions, but these are interconnected as a whole. The novelty of this study is the conceptualization of WLC as a disfunction at different level of the society, taking into account the human values, subjective perceptions and twin roles of human resources in private life and in their professions.

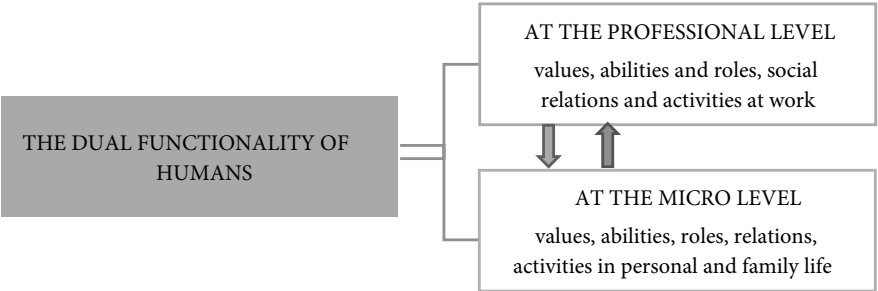


Figure 11.1: The dual functionality of humans at the personal and professional levels (Authors’ design).

A global report of the International Labour Organization (ILO, 2022) studying the WLB of employers around the world, connected this phenomenon with working hours. The report made differences between short (part-time), standard, and long hours of work. “Standard” work means 40 hours/week, while up to 48 hours/week pertained to “long hours.” 48 hours per week was fixed as the international standard for long working hours. The patterns differ based on where the workers are employed and whether they are full-time, part-time, self-employed, or other such working status: “Globally, 31.1 percent of employees regularly work more than 48 hours per week, but the proportion is much higher for self-employed workers, at 44.4 percent” (ILO, 2022, p. 15). In the education sector, globally 25.5% of the academics work more than 48 hours per week. During the Covid pandemic, in Eastern Europe, nearly 5% of the employees worked more than 48 hours (ILO, 2022).

A cross-national meta-analysis of WLC in 58 countries with different geographical and individual cultural values show a significant difference in WLC scores depending on the geographical region (Allen et al., 2020). In the US, 70% of workers perceived conflict between their work and personal life (Nicholes & Swanberg, 2018). Johnson et al. (2019) in their study conducted in the U.K., compared university and non-university human resources (n=652). The results of the study revealed some discrepancies between human resources who work in the academic and non-academic environments. Thus, academics reported a higher level of professional overload and a lower score in work-life balance values, while having a better organizational climate (working conditions, collegial relationships, remuneration).

In Europe the WLC subject has been researched for 20 years (McGinnity, 2021), but there is little research that has been conducted in former communist countries and also more particularly among academic human resources (junior and senior academics, professors, assistant lecturers, master teachers, researchers)

in Central and Eastern Europe. Whatever was published (Dorenkamp & Süß, 2017; Johnson et al., 2019) assessed academics from Western European countries, in different environments at mezzo and macro levels and at the micro level with different personal values, relations, activities.

As a result, the aim of this empirical research was to socially evaluate the work-life conflicts as it affects dual functionality of academics, specifically how their personal and family life at the micro level is affected by their profession on the mezzo level. What is more, we seek to measure the WLC score and examine the causes that predict the conflict, to get better career guidance, and to improve institutional social and higher educational policy.

2. Methods, Samples and Instrument

The quantitative cross-border data collection was conducted by the Center of Higher Education Research and Development at Debrecen University, Hungary in 2023. The questionnaire was developed based on qualitative research focus group interviews with 41 academics in Hungary, Slovakia, Ukraine, Romania, and Serbia. The overall objective of the data collection was to explore the difficulties related to the work of academic human resources and their personal and professional well-being (Kovács et al., 2024).

In our international quantitative study, a sample of N=821 academics (13.8% from Romania, 4.4% from Slovakia, 4.9% from Serbia, 14.1% from Ukraine, and 61.8% from Hungary) was included, 80% of which came from three EU states (Romania, Slovakia, and Hungary), and 20% from non-EU countries (Serbia and Ukraine). The complex questionnaire examined the professional and social background of the academics and measured the work-life balance/conflict based on Hayman (2005).

43.7% of academics were men, 56.3% were women, the average age was 46 (SD=10.71) and the average number of years in higher education was 17 (SD=11 years). Of the respondents, 78.6% had a scientific degree, and 59% were employed in the institutional academic role as an assistant professor or in a lower position. 27.9% specialized in medical/health sciences, 32.4% in humanities/pedagogy/languages/art sciences, 16.7% in social/economic sciences, and 23% in STEM and Agriculture sciences. The majority of respondents, 68.5%, were married, and 72.4% had children. About 47.6% reported having a relatively good financial standing, 38.4% average, and 14% poor, compared to families in their environment.

The complex questionnaire included the measures of work-life conflict score based on Hayman (2005). This dimension explores how academics' personal lives are affected by work, how work causes difficulties in their personal lives,

to what extent they neglect personal activities because of work, how satisfied they are with the time spent outside the professional sphere, and how well they can stabilize the relationship between work and personal life (6-item Cronbach α =0.948, KMO=0.905, p =000, explained variance 79.545%). The measuring scale is 5: 1—never, 2—probably not, 3—undecided, 4—probably yes, 5—totally yes.

Among the factors influencing WLC, we peered into the area of emotional exhaustion at work with 5 items: I feel emotionally exhausted from my work; I feel exhausted at the end of the working day; I feel tired when I wake up in the morning and have to face another day at work; Working all day is very demanding for me; My work makes me feel burned out (Cronbach α =0.911, KMO=0.852, p =000, explained variance 73.894%). The measuring scale was 7: 1—never, 2—a few times a year/less often, 3—monthly/less often, 4—a few times a month times, 5—weekly, 6—several times a week, 7—every day (Han et al., 2020).

The social support in work was measured with 4 items: I am satisfied with the level of support I get from the head of my department/institute/faculty; I am satisfied with the level of support I get from my colleagues; there is a full understanding between staff/head of the department and academics; and My efforts are appreciated (Cronbach’s α =0.867). The measuring scale was 5: 1—never, 2—probably not, 3—undecided, 4—probably yes, 5—totally yes. Factorial analyses were performed on principal components, resulting in one factor from the 4 variables (KMO=0.827 and p =0.000 with 71.61% explanations), and the factor was named “social institutional supports”—SIS factor. The statistical values of the main components are given in Table 11.1.

Table 11.1: The statistical values of the main components of work-related factors

The work factors of academics	Cronbach α	Mean	SD	N
Work-life conflicts (WLC)	0.948	46.76	27.87	806
Emotional exhaustion at work (EEW)	0.911	45.76	25.38	798
Social institutional support (SIS)	0.867	60.46	24.29	807

Source: CEETHE 2023.

As explanatory factors, we included country, age, gender, having children or not, and job-related characteristics such as job title (assistant professor or less; associate professor and above positions), and working hours per week. Statistical analyses performed by using SPSS 29 included ANOVA tests, principal component and factor analysis and finally a multistep linear regression (Pallant, 2020).

3. Results

3.1. The Work-Life Balance of Academic Human Resources. Their Work-Life Conflict Score

The subjective dimensions of the work-life balance/conflict dimension explore how academics' personal lives are influenced by work, how personal lives are made problematic because of work, how much personal activities are ignored because of work, the level of satisfaction of academics with time spent away from work, and their ability to harmonize work and personal life ((6-item Cronbach $\alpha=0.948$, KMO=0.905, $p=0.000$, explained variance 79.545%). The measuring scale is 5: 1—never, 2—probably not, 3—undecided, 4—probably yes, 5—totally yes.). For half of the academics (49%), work does not cause difficulties in their personal life, and for more than a third (38%), it's not hard to balance and separate the two environments (Table 11.2). However, more than a third (37%) of academics ignore their personal needs because of work, and a third (33%) perceive that they sacrifice their private life because of work. Statistical data show that more than a third of them had difficulty balancing between work and private life (39%), were dissatisfied with the time spent outside the workplace (39%), and nearly half of them reported missing personal activities in their personal life because of work (42%).

Factorial analyses were performed on principal components (Table 11.2), resulting in one factor (KMO=0.905, $p=0.000$, 79.545% explanations), named WLC factor (Cronbach $\alpha=0.948$; Mean=46.76; SD=27.76; N=806).

Table 11.2: Perception of the work-life conflict (%) and the principal component factor scores

	1—never	2	3	4	5—totally	N	WLC factor
My personal life is compromised because of work	18	26	27	19	10	819	0.89
Work causes difficulties in my personal life	20	29	25	18	7	819	0.89
My personal needs are neglected for work	17	23	23	27	10	819	0.91
I push my private life to the background for work	17	24	26	23	10	813	0.90
Personal activities are missing because work	14	19	25	27	15	819	0.91
I find it difficult to balance work with a life separate from work	15	23	23	26	13	817	0.86
I am dissatisfied with the amount of time allocated to activities outside the workplace	15	23	23	24	15	818	–

Source: CEETHE 2023.

Next, we investigated the WLC score of academics, using ANOVA test to compare means of WLC scores, depending on demographic, family and academic aspects (Table 11.3). Analyzing the effect of demographic variables, significant differences were found regarding gender ($F=8.9$ and $p=0.003$) and age ($F=8.7$ and $p=0.003$). The mean WLC score of female academics ($M=49$ and $SD=28$) was significantly higher than that of males ($M=43$ and $SD=28$). The mean WLC score of academics under 40 ($M=51$ and $SD=28$) was significantly higher than that of those aged 41 or older ($M=45$ and $SD=27$).

Analyzing family characteristics, significant differences were found between academics in the role of parenthood (having children) and academics without children ($F=13.8$ and $p=0.000$). The mean WLC score of academics who do not have children ($M=52$ and $SD=26$) was significantly higher than those who do ($M=44$ and $SD=28$). Though the mean WLC scores based on the country or region in which they work were different, they were not significant.

Significant differences were identified also between the mean WLC score of academic position ($F=7.2$ and $p=0.007$). The mean WLC score of university human resources in the position of, assistant professor or lower positions ($M=49$ and $SD=27.7$) was significantly higher than that of those in more advanced positions (associate professor or other high positions) ($M=43.6$ and $SD=27.9$). Significant differences between WLC scores were identified pertaining to working hours ($F=38.3$ and $p=0.000$). For academics working more than the standard of 40 hours ($M=36.6$ and $SD=27.8$), it was significantly higher than that of those who work short or standard hours ($M=50.2$ and $SD=27$).

Table 11.3: Differences in the WLC factor by the demographic, family, and professional factors (means on 0–100 points scale)

		WLC factor score	Mean	SD	F	p	N
Working time/ week	41 h or up	50.2	46.7	27.9	38.3	0.000	595
	36–40 h	36.6					207
Gender	Male	43.3	46.6	27.9	8.9	0.003	346
	Female	49.3					443
Institutional academic role	Associate profes- sor or higher	43.6	46.8	27.9	7.2	0.007	332
	Assistant profes- sor or lower	49					474
Countries	non-EU	43.8	46.7	27.9	2.1	0.147	152
	EU	47.4					652

		WLC factor score	Mean	SD	F	p	N
Age	18–40	51	46.7	27.9	8.7	0.003	250
	41 or up	44.7					532
Parenthood role	no children	52.4	46.3	27.7	13.8	0.000	209
	yes children	44					552

Source: CEETHE 2023.

The ANOVA test concluded that the effect of working hours ($F=38.3$), the role of parenthood ($F=13.8$) and gender ($F=8.9$) were the most significant variables ($p=0.000$). Minimal or standard hour workers, academic parents and males had the lowest score of WLC by a significant margin. Females, academics younger than 40 years, employed as assistant professors or lower, had the highest score of WLC by far (Table 11.3).

3.2. Predictors of the Work-Life Conflicts Between the Two, Personal and Professional Environments

Next, we applied multiple linear stepwise regression to establish causalities between WLC factors and other variables, in which the dependent variable was the WLC factor. Moreover, potential conflict predictors were introduced in 5 blocks: (1) emotionally exhaustion at work and working time, (2) social institutional support, (3) gender and the job title, (4) the region, the age, and the parenthood role of academic human resources. Adjusted R-square for the blocks was: (1) 0.494, (2) 0.502, (3) 0.521, (4) 0.520. The model was significant ($F=96.2$ and $p=0.000$). The Levene's interferential statistic used to test the homogeneity of variances was not significant in every case accepted.

A significant relationship was found for five explanatory variables (Table 11.4): emotional exhaustion at work factor ($\text{Beta}=0.57$, $p=0.000$, CI: 0.565–0.69), working time/week ($\text{Beta}=0.25$, $p=0.000$, CI: 3.574–5.541), social support ($\text{Beta}=-0.119$, $p=0.000$, CI: –4.863 to –1.769), gender ($\text{Beta}=0.106$, $p=0.000$, CI: 2.926–8.913), job title ($\text{Beta}=0.069$, $p=0.021$, CI: 0.596–7.271). The best predictor of WLC was the emotional exhaustion at work. According to Cohen and Cohen (1983), strength of correlation guidelines, there was a large correlation between these two variables. If negative emotions connected to work increase, WLC also grows. In addition, there were small but significant positive WLC ties to working hours, gender, and institutional academic roles. There was a negative but small connection between WLC and social support, meaning, if institutional support increases, WLC decreases.

Table 11.4: Multiple stepwise regression analyses. Prediction of WLC

Explanatory variables	B	Beta	P	T	CI	
Emotionally exhaustion at work factor	0.627	0.57	0.000	19.7	0.565	0.69
Working time/week	4.557	0.25	0.000	9.1	3.574	5.541
Social institutional support factor	-3.316	-0.119	0.000	-4.2	-4.863	-1.769
Gender (0—male, 1—female)	5.92	0.106	0.000	3.88	2.926	8.913
Job title (0—associate professor or higher, 1—assistant professor or lower)	3.9	0.069	0.021	2.3	0.596	7.271
EU or other countries (0—other, 1—EU)	-1.83	-0.026	0.132	-0.9	-	-
Age (0–18 to 40, 1–41+)	-0.975	-0.017	0.481	-0.5	-	-
Parenthood role (0—no children, 1—yes children)	-1.673	-0.027	0.357	-0.96	-	-

Source: CEETHE 2023.

4. Discussion

In our study we proposed an empirical analysis of academic career of human resources from Central–Eastern European (3 EU and 2 non-EU) countries from the dual perspective of the professional career and personal—family life and to identify the differences in WLC scores by demographic, family and working factors. Finally, we distinguished some predictors of WLC and social environments, where these can change.

Our results indicated, the WLC mean of academics from EU countries (Ro-mania, Slovakia and Hungary) was higher than from non-EU countries (Serbia, Ukraine), but the differences were not significant. Different Central–Eastern European regions had variations on WLC score of academics, but it was not relevant. The homogeneity of experiences is due to traditional values, norms, roles at the micro level of people living in these countries and the shared historical experiences at the mezzo and macro levels.

In our analyses we found only a quarter of all samples to be minimalist or standard in terms of working hours, the majority tend to work longer. Males and Hungarians significantly tend to work longer than others. The effect of working hours had a linear, weak but significant effect on WLC score according to our research. If the hours of work increase, the WLC score rises also, similar to previous researches (Golden et al., 2011; Cicek & Gezici, 2018). Qualitative research conducted in Finland found that families with two earning adults preferred 30-hour work weeks (Tammelin, 2009). An empirical study on a representative sample in the U.K. analyzed the working time of the employees and concluded, overtime or long hours were associated with higher frequency of

negative emotions. The human resources working part-time hours or irregular periods had a better WLC scores. Multinomial regression statistical test demonstrates long hour works weekly or daily in full-time job predicted not just the higher fatigue of employees, but, at the same time, their conflict between work and personal life was higher (Golden et al., 2011).

The differences depending on gender was significant, similar to previous researches (Bell et al., 2012; Mudrak et al., 2018; Chukwuemeka et al., 2023). The WLC of females was higher than of males. This is due to inequalities stemming from traditional roles, as a result of which women still have a higher proportion of domestic and family responsibilities than men (they spend more time on housework, are more likely to stay at home with their little children, they are out of the labor market and spend more time caring for children, etc.), which reinforcing the traditional gender roles among examined academics (Fényes et al., 2020). As a result of these factors, females work—life conflict score is higher even if in recent years an increasing proportion of men/fathers have also been involved in household tasks and caring for children (Sztáray & Drjenovszky, 2021). At the same time, modern father roles and associated behaviors (e.g., greater involvement in childrearing or housework) are still less common in Central and Eastern Europe, where people are more traditional than in Western European countries and have traditional values at the micro level. In the region, men's family-maintaining and existential tasks are characteristics (more responsibilities at work and higher salaries), which provides them fewer opportunities to join to family life (Fényes et al., 2020).

During the Covid isolation lifestyle, empirical analyses indicate a significant increase in the WLC mean score of females and mothers (Frank et al., 2021; Backhaus et al., 2023). Our results didn't support the increase in WLC scores of parents: academic parents had significantly lower WLC scores than those without children. This may be because the number of children is strongly correlated with age and job title. As our results above have shown, younger academics with lower academic rank work more and find it more difficult to reconcile (much) work and private life.

The mean WLC score of younger academics was significantly higher than that of those aged 41 or older. Across the lifespan, previous research (Huffman et al., 2013) found the same results: young employees had a significant higher score of the WLC, than older employees. Raiu (2021) analyzing the literature on the characteristics of employees from different generations, he highlighted that those who belong to the Y or Z generation (under 40 years old), need a high independency and flexibility at work, they are not willing to sacrifice for the company, the balance between work and personal life is very important for them. A research career is very strictly routine, and by the fact that at the beginning

of an academic career, more time and energy are required from academics for teaching and for the many other an academic staff may undertake (mentoring, talent management, class and schedule preparation, etc.). In our previous interview study, young academics found, at the outset of their careers, it was difficult to cope with multiple roles, especially teaching. They often, in addition to their teaching profession, had the additional burden of doing Ph.D. studies or writing their doctoral thesis. Fulfilling the role of an academic staff hardly allowed them to do other academic work (Kovács et al., 2024).

Nearly a third (31%) of academics feel emotionally exhausted weekly or even daily, and 20% feel several times a week or even every day burned out because of their work. But it is a much more important result that the emotional exhaustion in work is the biggest negative predictor of WLC. If an academic staff is tired, burned out, sees his or her work as meaningless and even works too much, compliance with the indicators of various performance evaluation systems, the underestimation of teaching work and related sub-fields compared to academic performance, or the lack of knowledge of clear institutional goals, expectations and tasks are all job demands in our interview research among academics in the region (Kovács et al., 2024), which contributes significantly to a more difficult work-life balance. A study among Australian academics (Bell et al., 2012) analyzed the emotional involvement of academics in work: job threat stress and job pressure stress together explained 61% ($R^2 \text{ adj} = 0.60$) of the variance in work-life conflict score. On our study negative emotions at work with other variables (working time, social institutional support, gender and the institutional academic role) explained 52% of the WLC variance.

An important protective factor of WLC is the social institutional support. Peer support, such as fostering a community of colleagues and students, can have a positive impact on academics' well-being and on WLC according to our results. A positive network of relationships between academics and supportive attitudes from students can help manage stress (Vigoda-Gadot & Talmud, 2010). Since the 1970s, discourse has pointed to the fact that peer (social) support acts only as a resistance factor; however, some have argued that its absence can be a source of stress (Thoits, 1985). If an academic's work is supported, valued and appreciated in their institution, and if they are recognized by their leaders and colleagues, it helps them to find a work-life balance. In this way, they feel that their work is not in vain and that they do not have to work day and night, even at the expense of their personal life, in order to be appreciated. Another dimension of peer support is the informal relationships with colleagues with whom you can share problems (whether work or personal) and from whom you can ask for help and advice to solve them.

5. A Social Evaluation Model of Factors Contributing to the WLC Phenomenon

Finally, we give answer to the question: which social environments (the micro, mezzo, or macro levels) are involved in these disfunctions (Fig. 11.2)? The working time and the fatigue contribute to the conflicts between work and personal life, and we can extend these as a general profile of an academic worker perceiving conflict at micro and professional level, but these factors can cause disfunctions at different environments. Gender's effect on increasing the WLC, which is a micro characteristic of human resources and is connected with the identifications of other family roles and responsibilities at the micro level (how affect family or personal life the work of academics), was not achieved in this study. Institutional position and social support at the workplace belong to the institutional and macro environments. Examining workplace stress, Salami's (2011) study investigated how peer support can mitigate the negative effects of workplace stress. These results support the view that environmental and personal factors have a strong influence on workplace stress. Good working relationships between lectures and a sense of belonging to the workplace community can be a source of strength. Colleagues can help solve problems and provide mentoring and support (Thoits, 1985).

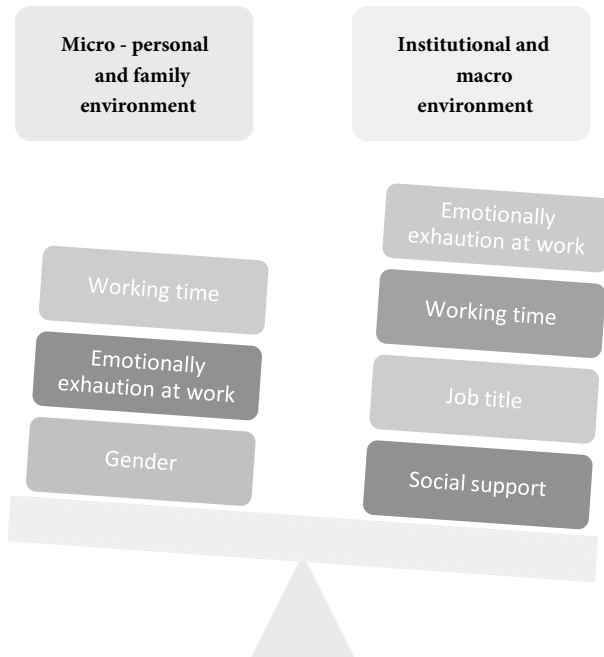


Figure 11.2: Different social environments implication on work-life imbalance (Authors' design).

The limitation of the study is that we did not cover all factors and causes of WLC and all universities, and all human resource populations from Romania, Slovakia, Hungary, Ukraine and Serbia. The study subjects were mostly Hungarian nationalities academics, and the results cannot be extent or generalized to these countries. We know that working hours are connected to workloads, specialization and work responsibilities, but here we did not introduce these dimensions. In our study we make a comparison just in regard to the academic position. One source of WLC is human values, regarding whether work interfaces with family at the level of values attainment (Perrewé et al., 1999). In addition, it would be important the social evaluation of the personal, family and professional values, and the connection or the fit of them. According to previous researches (Premeaux et al., 2007; Dorenkamp & Ruhle, 2019), WLC are related to different professional roles, responsibilities and actions connected with the workload and specialization also, so in the next study we will analyze these correlations.

Conclusions

In our study we proposed a holistic view of work-life conflict as a conflict in dual functionality of humans at different (micro and mezzo/macro) level of the society, integrating professional and personal values, abilities, roles, interactions and social behavior, as a whole. The dimension analyzed here was when work affected the personal or family life of academics from five Central and Eastern European countries. The novelty of this study is the conceptualization of the WLC as a disfunction at different level of the society, taking into account the human values, subjective perceptions and dual roles of human resources in private life and in their professions.

General organizational policy recommendation was formulated in the ILO report with the aim of decent work in the area of working time: promote health and safety; be “family-friendly” and improve workers’ work-life balance; promote gender equality; increase the productivity and sustainability of enterprises; and offer workers a degree of choice and influence over their hours of work (ILO 2022, p. 148). Our results lead us in the same direction: would be useful at professional levels, for higher education institutional managers, leaders of departments, faculty or rectors creating an equitable environment at mezzo levels, offering social counseling, mentoring and support for their employers and for social policy makers, creating norms and legislation, human and family-friendly programs at macro level in Central and Eastern European countries.

One of the most important findings of our research is that, in principle, micro-private life functions do not play a role in WLC, as the number of children is not a factor, while the quantity and quality of work is the main cause of these conflicts. Our findings highlight that dual functionality for junior academics is rather a multifaceted functionality related to work. The diversity of the work and the extra workload this entails make the situation particularly difficult for young academics. Teaching, research, mentoring and organizational tasks, as well as their own research and doctoral studies, are a major challenge for them. In relation to dual functionality theory, the primary cause of WLC is the acquisition of values and the need to cope with these different roles and their associated expectations. It would be important to develop mentoring and counseling programs, especially for junior or early-career academics, to help them with professional socialization, coping effectively with different tasks, as well as the support of the supervisor in doctoral research.

Our findings raise awareness of the importance of social evaluation of WLC factors, the social and mental health counseling services also for higher education human resources, including the provision of programs and opportunities to support the development of academics' practical knowledge and skills in the area of time management, with a particular focus on female academics. Other social and psychological factors may be at the root of work-life conflicts, and the involvement of professionals is needed to identify and address these. It is important that such services are provided within an institutional framework. One such good practice is the services for university employees and their family members, provided by the Mental Health Center of the University of Debrecen.

Another suggestion is to provide training for higher education managers and leaders to learn effective tools for recognizing and managing burnout (e.g., supervision), so that they can recognize in time when their staff are overworked, exhausted, having personal conflicts, and how to reduce work-related stress. They also contribute to the development of their leadership skills, since, as Mudrak et al. (2008) argued in their study, the majority of university leaders are promoted to leadership positions on the basis of their academic performance rather than their management skills. The above suggestions could be used to reduce work-life conflict at the individual and institutional levels and to effectively achieve a work-life balance that contributes to academics' enjoyment of their work, which in turn contributes to their well-being and productivity. After all, only happy, well-balanced academics can teach satisfied students and carry out effective academic work.

Acknowledgments

This publication was supported by the project “Investigating the role of sport and physical activity for a healthy and safe society in the individual and social sustainability of work ability and quality of work and life (multidisciplinary research umbrella program)” and by the János Bolyai Research Scholarship of the Hungarian Academy of Sciences.

References

- Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2020). A cross-national meta-analytic examination of predictors and outcomes associated with work-family conflict. *The Journal of Applied Psychology*, 105(6), 539–576. <<https://doi.org/10.1037/apl0000442>>
- Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: a review and agenda for future research. *Journal of Occupational Health Psychology*, 5(2), 278–308. <<https://doi.org/10.1037//1076-8998.5.2.278>>
- Anttila, T., Oinas, T., Tammelin, M. & Nätti, J. (2015). Working-Time Regimes and Work-life Balance in Europe. *European Sociological Review*, 31(6), 713–724, <<https://doi.org/10.1093/esr/jcv070>>
- Arieli, S., Sagiv, L., & Roccas, S. (2020). Values at work: The impact of personal values in organisations. *Applied Psychology: An International Review*, 69(2), 230–275. <<https://doi.org/10.1111/apps.12181>>
- Backhaus, I., Hoven, H., Bambra, C., Oksanen, T., Rigó, M., di Tecco, C., ... & Dragano, N. (2023). Changes in work-related stressors before and during the COVID-19 pandemic: differences by gender and parental status. *International Archives of Occupational and Environmental Health*, 96(3), 421–431. <<https://doi.org/10.1007/s00420-022-01933-w>>
- Bell, A. S., Rajendran, D., & Theiler, S. (2012). Job stress, wellbeing, work-life balance and work-life conflict among Australian academics. *E-Journal of Applied Psychology*, 8(1), 25–37. <<https://doi.org/10.7790/ejap.v8i1.320>>
- Bettini, E., Gilmour, A. F., Williams, T. O., & Billingsley, B. (2020). Predicting Special and General Educators’ Intent to Continue Teaching Using Conservation of Resources Theory. *Exceptional Children*, 86(3), 310–329. <<https://doi.org/10.1177/0014402919870464>>
- Bhui, K., Dinos, S., Galant-Miecznikowska, M., de Jongh, B., & Stansfeld, S. (2016). Perceptions of work stress cause and effective interventions in employees working in public, private and non-governmental organisations:

- a qualitative study. *BJPsych bulletin*, 40(6), 318–325. <<https://doi.org/10.1192/pb.bp.115.050823>>
- Boamah, S. A., Hamadi, H. Y., Havaei, F., Smith, H., & Webb, F. (2022). Striking a Balance between Work and Play: The Effects of Work-life Interference and Burnout on Faculty Turnover Intentions and Career Satisfaction. *International Journal of Environmental Research and Public Health*, 19(2), 809. <<https://doi.org/10.3390/ijerph19020809>>
- Carlson, D. S., & Kacmar, K. M. (2000). Work-family conflict in the organization: Do life role values make a difference? *Journal of Management*, 26(5), 1031–1054. <[https://doi.org/10.1016/S0149-2063\(00\)00067-2](https://doi.org/10.1016/S0149-2063(00)00067-2)>
- Chukwuemeka, U. M., Okonkwo, U. P., Njoku, C. J., Igwe, S. E., Oyewumi, T. J., & Ugwuanyi, D. C. (2023). Work-related stress, quality of life, and coping mechanism among lecturers in a Tertiary Educational Institution in Anambra State, Nigeria. *BMC psychology*, 11(1), 73. <<https://doi.org/10.1186/s40359-023-01114-5>>
- Cicek, I., & Gezici, A. (2018). The role of working hours on work-life conflict. *PressAcademia Procedia (PAP)*, 7(73), 376–380. <<http://doi.org/10.17261/Pressacademia.2018.920>>
- Clark Blickenstaff, J. (2005). Women and science careers: leaky pipeline or gender filter? *Gender and Education*, 17(4), 369–386. <<https://doi.org/10.1080/09540250500145072>>
- Cohen, P., Cohen, P., West, S. G., & Aiken, L. S. (1983). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* (2nd ed.). Psychology Press. <<https://doi.org/10.4324/9781410606266>>
- Conerly, T. R., Holmes, K., & Tamang, A. L. (2021). *Introduction to Sociology* 3e. OpenStax <<https://openstax.org/books/introduction-sociology-3e/pages/1-3-theoretical-perspectives-in-sociology>>
- Dorenkamp, I., & Süß, S. (2017). Work-life conflict among young academics: antecedents and gender effects. *European Journal of Higher Education*, 7(4), 402–423. <<https://doi.org/10.1080/21568235.2017.1304824>>
- Engler, Á. (2013). Students with Small Children in Higher Education. *Journal of Social Research & Policy*, 4(1), 109–120.
- Fényes, H. (2014). Gender Role Attitudes among Higher Education Students in a Borderland Central-Eastern European Region called “Partium.” *Center for Educational Policy Studies Journal*, 4(2), 49–70. <<https://doi.org/10.26529/cepsj.203>>
- Finkel, S. K., Olswang, S. G., & She, N. (2017). Childbirth, Tenure, and Promotion for Women Faculty. *The Review of Higher Education*, 17, 259–270. <<https://doi.org/10.1353/RHE.1994.0016>>

- Frank, E., Zhao, Z., Fang, Y., Rotenstein, L. S., Sen, S., & Guille, C. (2021). Experiences of Work-Family Conflict and Mental Health Symptoms by Gender Among Physician Parents During the COVID-19 Pandemic. *JAMA Network Open*, 4(11), e2134315. <<https://doi.org/10.1001/jamanetworkopen.2021.3431>>
- Giusti, L., Mammarella, S., Del Vecchio, S., Salza, A., Casacchia, M., & Roncone, R. (2023). Deepening Depression in Women Balancing Work-Life Responsibilities and Caregiving during the COVID-19 Pandemic: Findings from Gender-Specific Face-to-Face Street Interviews Conducted in Italy. *Behavioral Sciences*, 13(11), 892. <<https://doi.org/10.3390/bs13110892>>
- Golden, L., Wiens-Tuers, B., Lambert, S. J., & Henly, J. R. (2011). Working time in the employment relationship: Working time, perceived control and work-life balance. In K. Townsend, & A. Wilkinson (Eds.), *Research Handbook on the Future of Work and Employment Relations* (pp. 188–211). Edward Elgar Publishing Ltd.
- Greller, M. M., & Richtermeyer, S. B. (2006). Changes in social support for professional development and retirement preparation as a function of age. *Human Relations*, 59(9), 1213–1234.
- Guest, D. E. (2002). Perspectives on the Study of Work-life Balance. *Social Science Information*, 41(2), 255–279. <<https://doi.org/10.1177/0539018402041002005>>
- Han, J., Yin, H., Wang, J., & Zhang, J. (2020). Job demands and resources as antecedents of university teachers' exhaustion, engagement and job satisfaction. *Educational Psychology*, 40(3), 318–335. <<https://doi.org/10.1080/01443410.2019.1674249>>
- Hayman, J. (2005). Psychometric Assessment of an Instrument Designed to Measure Work Life Balance. *Research and Practice in Human Resource Management*, 13(1), 85–91. <<http://hdl.handle.net/20.500.11937/46385>>
- Huffman, A., Culbertson, S. S., Henning, J. B., & Goh, A. (2013). Work-family conflict across the lifespan. *Journal of Managerial Psychology*, 28(7–8), 761–780. <<https://doi.org/10.1108/JMP-07-2013-0220>>
- Iamtrakul, P., & Chayphong, S. (2022). Exploring the Influencing Factors on Living Alone and Social Isolation among Older Adults in Rural Areas of Thailand. *International Journal of Environmental Research and Public Health*, 19(21), 14572. <<https://doi.org/10.3390/ijerph192114572>>
- International Labour Organization—ILO (2022): Working Time and Work-life Balance Around the World. Geneva: International Labour Office. ISBN: Web PDF: 9789220378915.
- Johnson, S. J., Willis, S. M., & Evans, J. (2019). An examination of stressors, strain, and resilience in academic and non-academic U.K. university job

- roles. *International Journal of Stress Management*, 26(2), 162–172. <<https://doi.org/10.1037/str0000096>>
- Keating, L. E., Becker, S., McCabe, K., Whattam, J., Garrick, L., Frey, B. N., Sassi, R. B., & McKinnon, M. C. (2019). Impact of a structured, group-based running programme on clinical, cognitive and social function in youth and adults with complex mood disorders: a 12-week pilot study. *BMJ Open Sport & Exercise Medicine*, 5(1), e000521. <<https://doi.org/10.1136/bmjsem-2019-000521>>
- Keltner, D., & Kring, A. M. (1998). Emotion, Social Function, and Psychopathology. *Review of General Psychology*, 2, 320–342. <<https://doi.org/10.1037/1089-2680.2.3.320>>
- Kossek, E., & Lee, K. (2017). Work-Family Conflict and Work-life Conflict. *Oxford Research Encyclopedia of Business and Management*. Retrieved from <<https://oxfordre.com/business/view/10.1093/acrefore/9780190224851.001.0001/acrefore-9780190224851-e-52>>
- Kotwal, A. A., Kim, J., Waite, L. J., & Dale, W. (2016). Social Function and Cognitive Status: Results from a US Nationally Representative Survey of Older Adults. *Journal of General Internal Medicine*, 31, 854–862. <<https://doi.org/10.1007/s11606-016-3696-0>>
- Kovács, K., Dobay, B., Halasi, S., Pinczés, T., & Tódor, I. (2024). Demands, resources and institutional factors in the work of academic staff in Central and Eastern Europe: results of qualitative research among university teachers in five countries. *Frontiers in Education*, 8, 1326515. <<https://doi.org/10.3389/educ.2023.1326515>>
- McGinnity, F. (2021). Work-life Conflict in Europe. In F. Maggino (ed.), *Encyclopedia of Quality of Life and Well-Being Research* (pp. 1–6). Springer. <https://doi.org/10.1007/978-3-319-69909-7_3727-2>
- Miller, J. E., & Hollenshead, C. (2005). Gender, family, and flexibility: why they're important in the academic workplace. *Change*, 37(6), 58–62.
- Misra, J., Lundquist, J. H., & Templer, A. (2012). Gender, Work Time, and Care Responsibilities Among Faculty. *Sociological Forum*, 27, 300–323. <<https://doi.org/10.1111/j.1573-7861.2012.01319.x>>
- Mudrak, J., Zabrodska, K., Kveton, P. et al. (2018). Occupational Well-being Among University Faculty: A Job Demands-Resources Model. *Research in Higher Education*, 59, 325–348. <<https://doi.org/10.1007/s11162-017-9467-x>>
- Nichols, H. M., & Swanberg, J. E. (2018). Measuring Work-Life Conflict Among Low-Wage Workers. *Journal of the Society for Social Work and Research*, 9(3), 473–497. <<https://www.journals.uchicago.edu/doi/full/10.1086/697254>>

- O'Laughlin, E. M., & Bischoff, L. G. (2005). Balancing Parenthood and Academia: Work/Family Stress as Influenced by Gender and Tenure Status. *Journal of Family Issues*, 26(1), 79–106. <<https://doi.org/10.1177/0192513X04265942>>
- Paksi, V., Nagy, B., & Király, G. (2016). The timing of motherhood while earning a Ph.D. in engineering. *International Journal of Doctoral Studies*, 11, 285–304. <<https://doi.org/10.28945/3544>>
- Paksi, V., Nagy, B., & Tardos, K. (2022). Perception of Barriers to Motherhood: Female Ph.D. Students' Changing Family Plans in the STEM Fields. *Social Inclusion*, 10(3), 149–159. <<https://doi.org/10.17645/si.v10i3.5250>>
- Pallant, J. (2020). SPSS Survival Manual: A step-by-step guide to data analysis using IBM SPSS (7th ed.). Routledge. <<https://doi.org/10.4324/9781003117452>>
- Perrewé, P. L., Hochwarter, W. A., & Kiewitz, C. (1999). Value attainment: an explanation for the negative effects of work-family conflict on job and life satisfaction. *Journal of occupational health psychology*, 4(4), 318–326. <<https://doi.org/10.1037/1076-8998.4.4.318>>
- Posner, B. Z. (2010). Another Look at the Impact of Personal and Organizational Values Congruency. *Journal of Business Ethics*, 97(4), 535–541. <<http://www.jstor.org/stable/40929512>>
- Pratt, C. C. (1969). *The Task of Gestalt Psychology*. Princeton University Press.
- Premeaux, S. F., Adkins, C. L., & Mossholder, K. W. (2007). Balancing work and family: A field study of multi-dimensional, multi-role work-family conflict. *Journal of Organizational Behavior*, 28(6), 705–727. <<https://doi.org/10.1002/job.439>>
- Pusztai, G., & Márkus, Zs. (2019). Paradox of Assimilation among Indigenous Higher Education Students in Four Central European Countries. *Diaspora, Indigenous, and Minority Education*, 13(4), 201–16. <<https://doi.org/10.1080/15595692.2019.1623193>>
- Raiu, S.-L. (2021). Generațiile X, Y și Z pe piața muncii. Caracteristici specifice, strategii de implicare în învățarea activă și abordări ale relației managerilor cu angajații. *Sociologie Românească*, 19(2), 89–121. <<https://doi.org/10.33788/sr.19.2.4>>
- Riemenschnieder, A., & Harper, K. V. (1990). Women in academia: guilty or not guilty? conflict between caregiving and employment. *Initiatives* 2, 27–35.
- Saeed, K., & Farooqi, Y. A. (2014). Examining the relationship between work life balance, job stress and job satisfaction among university teachers (A case of University of Gujrat). *International Journal of Multidisciplinary Sciences and Engineering*, 5(6), 9–15.

- Salami, S. O. (2011). Job Stress and Burnout among Lecturers: Personality and Social Support as Moderators. *Asian Social Science*, 7(5), 110–121. <<https://doi.org/10.5539/ass.v7n5p110>>
- Santana, E., Silva, R., Bernardo, J., Loureiro, R., Gil, I., Mestre, T., & Reis, L. (2022). Social Representations of Violence among Brazilian Older People with Functional Dependence. *Journal of Ageing and Longevity*, 2(3), 228–239. <<https://doi.org/10.3390/jal2030019>>
- Santana-Monagas, E., Putwain, D. W., Núñez, J. L., Loro, J. F., & León, J. (2021). Do teachers' engaging messages predict motivation to learn and performance? *Revista de Psicodidáctica*, 27(1), 86–95. <<https://doi.org/10.1016/j.psicoe.2021.11.001>>
- Sen, A. (1985). *Commodities and Capabilities*. United Nations Development Programme, Human Development Report 2006–08. United Nations.
- Shockley, K. M., Shen, W., DeNunzio, M. M., Arvan, M. L., & Knudsen, E. A. (2017) Disentangling the Relationship Between Gender and Work-Family Conflict: An Integration of Theoretical Perspectives Using Meta-Analytic Methods. *Journal of Applied Psychology*, 102(12), 1601–1635 <<http://dx.doi.org/10.1037/apl0000246>>
- Silva, A. L. S. E., Ottaviani, A. C., Orlandi, F. S., Inouye, K., Zazzetta, M. S., Pavarini, S. C. I., & Santos-Orlandi, A. A. D. (2023). Social support perceived by elderly people in social vulnerability according to family functionality: a cross-sectional study. *Revista da Escola de Enfermagem da USP*, 57, e20220475. <<https://doi.org/10.1590/1980-220X-REEUSP-2022-0475en>>
- Sirgy, M. J., & Lee, D. J. (2018). Work-life Balance: An Integrative Review. *Applied Research in Quality of Life*, 13(1), 229–254. <<https://doi.org/10.1007/s11482-017-9509-8>>
- Stinson, J., Wolfe, R. & Spaulding, W. (2022). Social Connectedness in Schizotypy: The Role of Cognitive and Affective Empathy. *Behavioral Sciences*, 12(8), 253. <<https://doi.org/10.3390/bs12080253>>
- Sztáray Kézdy, É. & Drjenovszky, Z. (2021). Hungarian Stay-at-Home Fathers: A New Alternative for Family Wellbeing. *Social Sciences*, 10(6), 197. <<https://doi.org/10.3390/socsci10060197>>
- Tammelin, M. (2009). *Working time and family time: experiences of the work and family interface among dual-earning couples in Finland* (No. 355). Academic Dissertation. University of Jyväskylä. <<https://jyx.jyu.fi/bitstream/handle/123456789/19730/9789513935160.pdf?seq>>
- Thoits, P. A. (1985). Social Support and Psychological Well-Being: Theoretical Possibilities. In I. G. Sarason, & B. R. Sarason (Eds.), *Social Support: Theory,*

- Research and Applications (pp. 51–72). NATO ASI Series, vol 24. Springer. <https://doi.org/10.1007/978-94-009-5115-0_4>
- Vigoda-Gadot, E., & Talmud, I. (2010). Organizational politics and job outcomes: The moderating effect of trust and social support. *Journal of Applied Social Psychology*, 40(11), 2829–2861. <<https://doi.org/10.1111/j.1559-1816.2010.00683.x>>
- Vveinhardt, J. (2017). *Congruence of Personal and Organizational Values—How to Deal with?* InTech. <<http://doi:10.5772/intechopen.72213>>
- Warr, P. (1992). Age and occupational well-being. *Psychology and Aging*, 7(1), 37–45. <<https://doi.org/10.1037/0882-7974.7.1.37>>