

# Perception of work environment among women and men – workload and autonomy in relation to job engagement

MAGDALENA JAWOREK<sup>1</sup>

ANNA MARIA DYLAĞ<sup>2</sup>

The Jagiellonian University in Kraków, Institute of Economics, Finance and Management

## Abstract

This article refers to the phenomenon of employee engagement as one of the key aspects of contemporary human resources management. The concept of professional engagement is a multi-dimensional approach relating to the positively understood effects of work, welfare of an employee, and optimization of the organization and its environment. Job engagement is believed to be strongly related to such processes as introduction of change in organizations, quality and performance issues, customer satisfaction or health, and effectiveness of people and organizations. Following the widely recognized in occupational health psychology model of Karasek (1979) and its further expansions, the authors of this article look upon work engagement as a subjective, psychological state of employees that emerges in certain circumstances, namely a “healthy” work environment. Following Karasek’s thinking it was hypothesised that perception of manageable workload and sufficient autonomy will lead to the most required effects, such as higher levels of job engagement and its positive consequences.

Thus, the specific purpose of this article is to investigate the way employees perceive their work environment in terms of workload and job autonomy in relation to job engagement. The empirical research was conducted from the perspective of the analysis of professional activity depending on the gender of respondents, limitations of social roles and the situation of women in Poland. The authors of the article conducted a questionnaire survey on a sample of 748 economically active persons, both women and men. The analyses showed statistically significantly higher levels of all three examined dimensions of job engagement (i.e. absorption, dedication, vigour) in women compared to men, together with

---

<sup>1</sup> magdalena.jaworek@uj.edu.pl

<sup>2</sup> a.dylag@uj.edu.pl

a lower level of control (professional autonomy) declared by women. Control was a clear predictor of work engagement, to a similar extent in both men and women. In contrast, the relationship of workload with absorption, dedication and vigour proved to be variable and dependent on gender.

**Paper type:** research article

**Keywords:** workload, job control, work engagement

## Introduction<sup>3</sup>

The article presents the results of research on the perception of the selected factors of work environment from the perspective of psychosocial determinants of engagement, taking into account gender. Additionally, the authors analysed the situation of women on the labour market, their professional activity and salary, preferred values and roles, and other non-professional duties, with respect of international studies (OECD, 2014).

The inclusion of gender roles, including equal opportunities for women and men on the labour market opens up new space for research, with a particular focus on engagement, efficiency and innovation. Opportunities for professional development of women or, at least, meeting growing demands posed by modern work to them, remain limited. On the one hand, women are increasingly visible in public spaces traditionally reserved for men. They participate in the educational process at all available levels. On the other hand, one can still notice disadvantageous differences in pay and the inability to use the bonuses offered by employers in the case of women. Interestingly, according to the latest analysis of the Central Statistical Office (Śliwicki, 2015), the earning potential of women was estimated to be higher than for men. However, analysis of the hourly wage gap between men and women shows that women, despite the higher potential in the labour market, are generally less well paid than men. In addition, the disparity in earnings of these groups over the observed period increased – women instead of earning more than men earn less (Śliwicki, 2015).

It seems that the non-professional (not related to work) restrictions of women are a major barrier to their professional activity. What should be highlighted is the greater amount of family responsibilities that women are burdened with, including caring for children and the elderly. According to the author of report Gender Index – Equal Opportunities Company “involvement in housework is perceived by public opinion as one of the main barriers to the advancement of women and the most

---

<sup>3</sup> This project (*Innovative Gender as a New Source of Progress*) is funded from Norway Grants in the Polish-Norwegian Research Programme operated by the National Centre for Research and Development.

important reason for their smaller presence in public life” (Lisowska, n.d., p. 38). In the context of commitment and innovation, a greater amount of responsibilities of women can result in their inability to fully use their potential and professional qualifications (Graniewska & Balcerzak-Paradowska, 2003).

According to the psychological model of Karasek (1979) and its further expansions (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001b), an analysis of the subjective feelings of both female and male respondents on the resources and constraints perceived by employees in organizations was conducted. The creators of the aforementioned concept suggest the description of working conditions, in which – depending on the combination of the selected factors – there is a specific potential for effective performance. Work in the environment that can be described as “better” or “healthier,” i.e. rich in resources (including psycho-social resources), brings desirable consequences for individuals and organizations. Among the positive effects, you can name, first of all, higher professional engagement, which is considered to be one of the key determinants of good health of employees and organizations, and even innovation (Huhtala & Parzefall, 2007; cf. Dyląg & Łącała, 2014). Working in “worse” conditions, i.e. poorer in resources (including psychosocial resources), or in those where instead of resources there are barriers and restrictions, causes side effects such as: decrease in productivity and efficiency, withdrawal of professional engagement, loss of innovation, and even the risk of professional burnout (cf. Maslach & Leiter, 2011; Bakker, Schaufeli, Leiter, & Taris, 2008; Jaworek & Dyląg, 2015). According to the Karasek model, the best predictors for the welfare and effectiveness of employees and the organization is the combination of work requirements (degree of workload) and employee autonomy (degree of control over tasks) in which the mutual interaction of these factors brings the desired development effect. In the environment poor in support and development factors, or full of visible limitations – the behaviours of employees are focused on defending their own resources. This can be done by gradually minimizing job contribution and engagement until the full development of professional burnout (Maslach, Schaufeli, & Leiter, 2001). Burnout is often defined as “erosion” of the original commitment (Maslach & Leiter, 2011).

To sum up, the main purpose of the article is to investigate differences between men and women from Polish organizations with respect to their perception of work environment: workload and autonomy (Karasek’s Model) as a potential factors determining work engagement and innovative behaviours. To show some aspects the situation of men and women in Poland in relation to work, data from OECD report (2014) were analysed and presented them compared to other countries.

## 1. The situation of women on the labour market in Poland

The contemporary labour market often requires the oversized commitment and availability of employees. The work also becomes increasingly complex, workload is both of a quantitative and qualitative nature. According to the authors of the CSO 2014 report, the level of activity of women is lower than in the case of men. The reasons for the lower professional activity of women compared to men included, among other things: longer education of women (women learn and study for a longer period of time), obligations with regard to home and family, childcare, care for the elderly or the sick, which results in more frequent resignation from work, early retirement and the lack of legal and institutional solutions supporting the professional activity of women (Dziubińska-Michalewicz, 2007, pp. 117–119). Women, to a small degree, occupy management positions. Their types of jobs are most often office work, work in education and assistance. Lower professional activity of women is also linked to their reduced mobility, and continuity of career is interrupted by leaves related to maternity and child-rearing (ARC, 2007; CBOS, 2002, 2013). The authors of research *Professional and Educational Activity and Family Responsibilities* have recognized the following as the reasons for this situation: the traditional family model, unequal distribution of household chores, poor access to care institutions, insufficient dissemination of goods and services to replace housework, barriers to undertaking work, achieving promotion and higher earnings, difficult return to work after a break caused by maternity leave and rigid working time (Kotowska, Sztanderska, & Wóycicka, n.d.). It was also indicated that the above restrictions (appearing in almost all dimensions of social life) are deeply rooted in Polish national culture and tradition, which is an additional barrier that is difficult to remove.

### Work, self-fulfilment and creativity as values for women

It is assumed that women and men have developed different priorities in their lives, different values and ways of reconciling social roles. In terms of tradition, women are associated with the duties related to the care of home and family (both offspring and older generations), and men with the defence of territory and property, economic support of his family, expansion and development. The results of research on the subject of work as values in the lives of women are diverse and sometimes divergent (cf. CBOS, 1993, 2001, 2013; Górnikowska-Zwolak, 2000; Kotlarska-Michalska, 2001; Krajewska, 2002). Opinions of female respondents range from instrumental attitudes (work as a means for other purposes) to autotelic attitudes (work as a value in itself). These differences reflect both the demographic features and particulars of survey samples (age, residence, employment, and education of re-

spondents) as well as the period in which the study was conducted. The report on qualitative research for the Polish Agency for Enterprise Development shows that the most important value in the lives of working women – both in companies using high technologies as well as in other workplaces (e.g. in companies that do not use high technologies) – is family (ARC, 2007, p. 16). It is followed by work and their own professional development, understood as permanent training and improving their qualifications. Unlike men, who focus on high earnings and being promoted, female respondents declared the need for continuous development rather than rapid promotion. The study has identified a group of women-mothers for whom the stability of employment and security, even at the expense of material gratification, was the most important. On the other hand, regular analyses conducted within the framework of the Social Diagnosis showed that the value system of Poles is quite stable, also taking into account the gender of respondents (Czapiński, 2013). Women more than men appreciate family values, spirituality and health, kindness and respect of the environment, and men more than women – work, money, freedom, and strong character (Czapiński, 2013, p. 221). In our research on contemporary profiles of men and women with regard to creativity, the authors analysed individual and organizational value systems (Dyląg & Szafranski, in print). The research results showed that the profiles of men and women do not differ substantially regarding the chosen categories, although values as concepts seem generally more important for women than men (i.e. women declared more emphasis on values than men). In previous studies (Dyląg, Jaworek, Karwowski, Kożuszniak, & Marek, 2013), the consistency of individual values with the ones relating to the organization was a factor positively correlating with professional commitment, while conflict of values correlated with burnout.

## Reconciling work and family responsibilities, work-home balance

Putting work and private life in opposition to each other seems to be an obsolete view. According to modern guidelines, professional and personal spheres should harmoniously complement each other – especially since home is not always a place of rest and relaxation. This is especially true for women who must combine the two spheres – and in both maintain efficiency. In studies on perception of home as key living space, it turned out that women with higher education feel better (i.e. it is more comfortable) at their own home. In contrast, women (and men) with lower education associate home with additional work rather than the place of rest. However, women in this group of respondents declared at the same time a strong sense of influence on what happens at home, which was a kind of compensation for the effort put in its maintenance (Titkow, Duch-Krzyszczek, & Budrowska, 2004). In the mentioned Social Diagnosis 2013 (Czapiński, 2013, p. 130) respondents were

asked questions about solutions that facilitate the reconciliation of work and family responsibilities, especially with parental responsibilities. What was the most commonly indicated as preferred by both women and men were: flexible working hours, better opportunities for care for children by age of seven outside the home, higher benefits, and also the ability to perform part of the work at home.

The idea of balance between work and personal life was considered so important that it was included in the recent OECD study (2014) on the quality of life. Apart from this indicator living conditions, income, level of employment and unemployment, quality of network of social support, education, environment, commitment to democracy, health, life satisfaction and safety were also included. The study involved 36 countries from around the world, including the United States, Mexico, Australia, Japan, Brazil, Chile, Russia and a number of European countries, including Poland.

The indicators of balance between work and personal life included the proportion of people working more than 50 hours a week and the amount of time devoted to relaxation, entertainment and their own care (eating, sleeping, personal hygiene, etc.). In relation to the first indicator, Poland occupies the 21<sup>st</sup> place with a rate of 7.6%, slightly deviating from the OECD average. However, in terms of average number of hours spent at work during the year, Poles far exceed the average of OECD countries (1765) with more than 150 hours (1929), which gives us the sixth place from the end. Only people in Russia, Chile, Greece, South Korea, and Mexico work more than people in Poland. The Dutch, Germans, Norwegians and the French (Figure 1) spend the smallest amount of time, that is, approx. 500 hours less than Poles at work. With the distinction of sex, far more men (12%) than women (3%) spend at work more than 50 hours a week.

In the case of the second indicator – the time spent on housework – Poland is definitely worse in comparison with other countries and took the 34<sup>th</sup> place. This is probably due to the large amount of time spent at work and large workload. To leisure, along with personal care, Poles devote 14.2 hours a day – almost two hours less than respondents from Denmark and Spain. While there are no major disparities in this regard between women and men, then in the case of the division of household duties, there is a significant difference. Women, daily spend on average almost 300 minutes on housework and taking care of other family members, while men – 157 minutes, even though it is more than the OECD average (141 minutes). The greatest amount of time, that is, more than 370 minutes during the day, is spent on household chores by women from Turkey and Mexico, the least amount of time by women from Sweden, Norway and South Korea; when it comes to men, the ones who are the most involved in cooking, laundry and cleaning are the men from Denmark, Norway and Austria, and the least – from South Korea, Japan and Portugal (Figure 2).

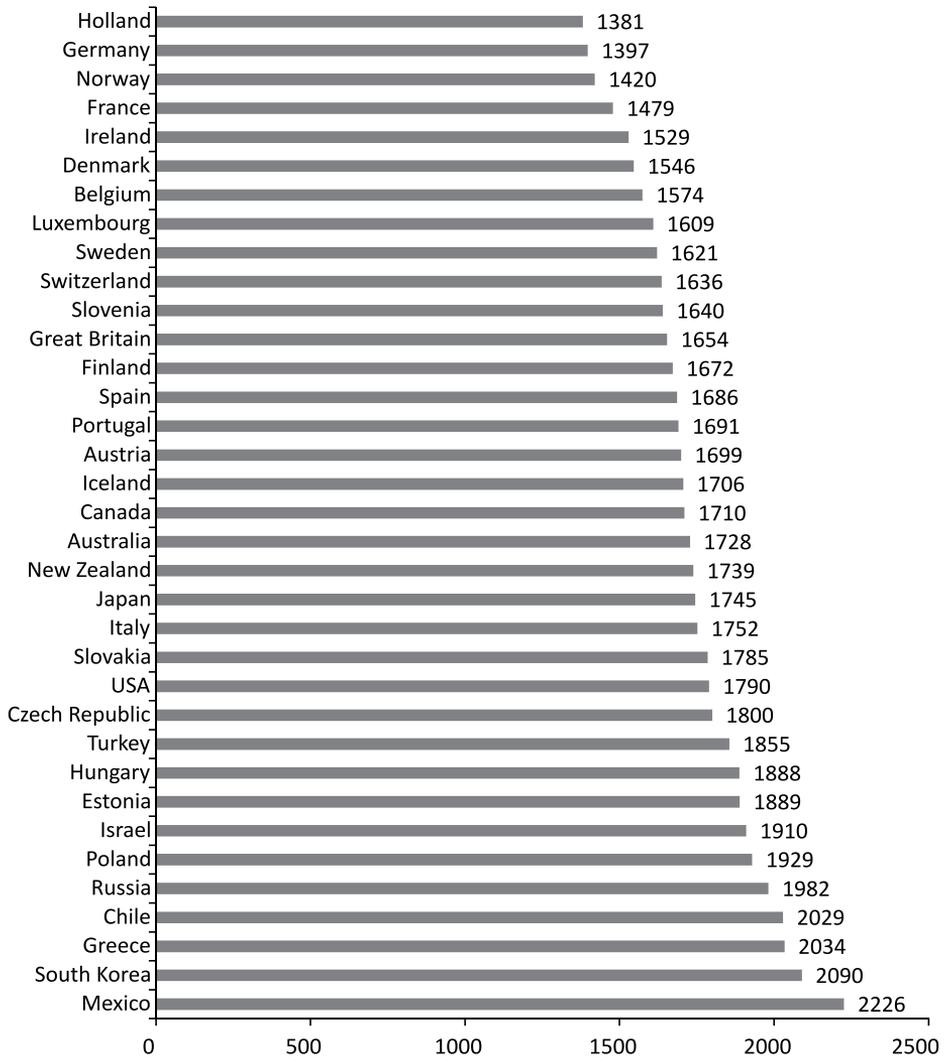


Figure 1. Average number of hours spent during the year of work in the OECD countries.

Source: based on data from the OECD (2014) analysis.

Given the disparity in the time frame of housework between men and women in Poland, it amounts to 139 minutes – slightly more than the OECD average (133 minutes). The smallest differences are found in Norway, Sweden and Denmark, the largest – in Turkey, Mexico, Japan and Portugal. It should be noted that the total time spent on activities related to home and family care vary from country to country and varies from 272 minutes in South Korea to more than 480 in Australia, Mexico and Turkey (Table 1).

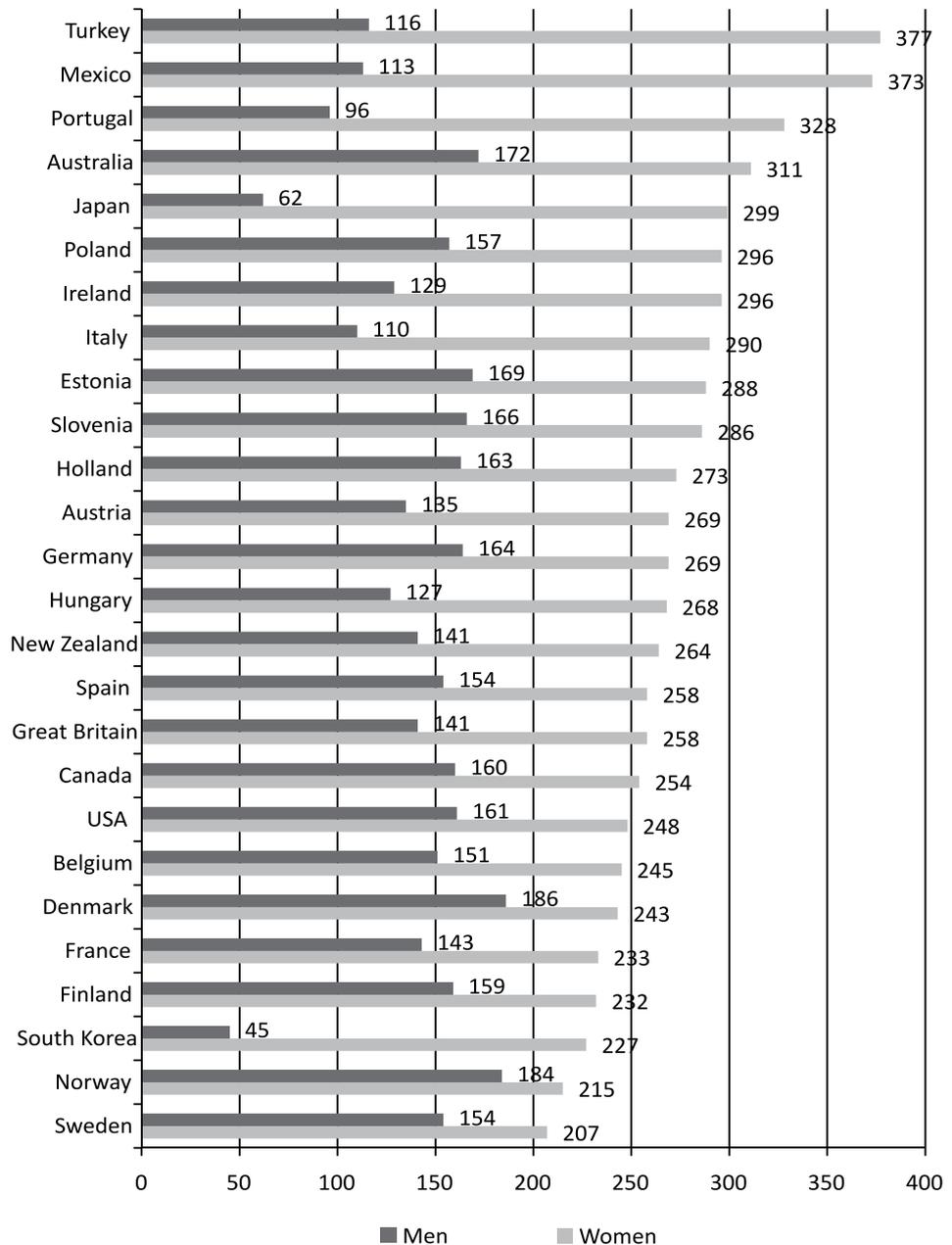


Figure 2. *The average amount of time (in minutes) allocated to housework during the day broken down by gender in different OECD countries.*

Source: based on data from the OECD analysis (2014).

Table 1 *Sum, difference, and the average of amount of time (in minutes) allocated to housework during the day (washing, cleaning, cooking) in individual countries broken down by gender*

Country	Housework		Sum	Difference
	Women	Men		
Sweden	207	154	361	53
Norway	215	184	399	31
South Korea	227	45	272	182
Finland	232	159	391	73
France	233	143	376	90
Denmark	243	186	429	57
Belgium	245	151	396	94
USA	248	161	409	87
Canada	254	160	414	94
Great Britain	258	141	399	117
Spain	258	154	412	104
New Zealand	264	141	405	123
Hungary	268	127	395	141
Germany	269	164	433	105
Austria	269	135	404	134
Holland	273	163	436	110
Slovenia	286	166	452	120
Estonia	288	169	457	119
Italy	290	110	400	180
Ireland	296	129	425	167
Poland	296	157	453	139
Japan	299	62	361	237
Australia	311	172	483	139
Portugal	328	96	424	232
Mexico	373	113	486	260
Turkey	377	116	493	261
OECD average	273.35	140.69	414.04	132.65

Source: based on the OECD (2014) analyses.

## 2. Assumptions of empirical research

Professional involvement relatively recently has become the subject of research in the context of the work environment. The phenomenon is connected to the devotion and loyalty of the employee, and more specifically to the degree of the individual's identification with the organization and the intensity of the activities undertaken for the company. According to Armstrong (1996), engagement (involvement) consists of: a strong desire to remain a member of a particular organization, high loyalty and belief in the organization and acceptance of its values and objectives; willingness to take a lot of effort for the organization. The general definition of commitment is involvement in something and a tendency to take part in something (Szymczak, 1981, in Bugdol, 2006). According to the concept of Maslach and Leiter (2011), involvement is considered to be the opposite of burnout and is determined by high energy level, active participation in work and a sense of efficiency. These two constructs are a kind of one dimension here, where at one end there is burnout, and on the other – involvement in work. However, some authors, such as Schaufeli, Taris, and van Rhenen (2008), Bakker et al. (2008) maintain that commitment to work is a separate construct, although inversely correlated with the burnout syndrome. Probably the most frequently cited concept of commitment to work has been created by them. They define commitment to work as constantly lasting, positive state of mind, which sets a high level of vigour, dedication and absorption. Vigour is a high energy level, readiness to take effort and to continue working despite the mounting obstacles and problems. Absorption refers to a state of full concentration on the task being performed, “a feeling of losing oneself” during its implementation. Dedication, in turn, is characterized by involvement in one's work and experiencing a sense of purpose, enthusiasm, inspiration, pride and challenges compared to the flow by Csikszentmihalyi (Schaufeli, Salanova, González-Romá, & Bakker, 2002; Bakker et al., 2008; Schaufeli et al., 2008).

Research shows that a high level of commitment to work is associated with many benefits for both the employee and the organization. One can mention here: proactive behaviours (Salanova & Schaufeli, 2008), a sense of better performance of work by employees (Bakker & Bal, 2010), lower levels of stress and depression (Schaufeli et al., 2008) or minor psychosomatic ailments (Demerouti, Bakker, de Jonge, Jansen, & Schaufeli, 2001). Gains from employee engagement are drawn by the organization – expressed through customer loyalty to the organization (Salanova, Agut, & Peiró, 2005), smaller desire to leave their jobs (Schaufeli & Bakker, 2004), or sense of commitment to the organization (Hakanen, Schaufeli, & Ahola, 2008).

Autonomy, understood as the need for self-control of the situation, is the subject of psychological research in conjunction with many aspects of life, including professional area. On the other hand, the lack of autonomy results in a sense of overload, tension and a decrease in the quality of work. Even Van Harrison,

in the classical research on individuality – environmental adaptation of man to work, considered taking into account own needs and values of workers to increase their subjective consistency with the organization, which in turn should lead to a steady increase of self-esteem, overall development of the personality of an individual, improvement of health and better functioning at work (p. 265, in Cooper & Payne, 1987). The importance of the subjective sense of control reflects the position of this factor in many models of organizational stress including, in model Requirements–Resources (Demerouti et al., 2001b) and the classic paradigm by Karasek (1979) Requirements–Control cited for the purpose of own research. In each of them, a low range of control leads to negative consequences, which is also demonstrated by empirical analyses. For example, studies by Schmitz, Neumann and Oppermann (2000) showed that a lower sense of control is associated with greater work-related stress and burnout.<sup>4</sup> Similarly, in research by Bordia with the team (2004) one observed that the lack or low level of control increases psychological tension, which leads to lower job satisfaction and makes the employee more often and more seriously consider changing jobs. On the other hand, studies by Finn (2001) found that among the nurses surveyed autonomy is the most important component of job satisfaction.

Yet a more important sense of control is in the context of commitment and – probably – innovation. As research indicates, creative individuals are those who have their own opinions and are not afraid of expressing them (low agreeableness), they do not like to submit to the standards (low conscientiousness), have broad horizons, and also exhibit a high tolerance for change (openness to experiences). Most likely, such a person will not feel comfortable in the environment fortified by the rules, regulations and rigid standards, authoritarian style of leadership and strict hierarchy and where work or product is to be made according to a strict set of rules (Jaworek & Dyląg, in print). Commitment, efficiency and innovation require a variety of resources. According to the model by Demerouti et al. (2001a, b) resources are located on three levels: organizational (e.g. salary, career opportunities, job security), interpersonal (e.g. support of supervisor and co-workers, atmosphere of team), organization of work (e.g. the clarity of the professional role, participation in decisions), and finally – they relate to task itself (e.g. receiving feedback on their work, importance of the task, autonomy). In turn, high work requirements relate to the physical, social, psychological and organizational aspects of work demanding physical and/or psychological effort, which carries physiological and/or psychological costs. The requirements of work, according to the article authors, include, for example, a lot of pressure associated with work, inadequate physical conditions of work, or too many duties (Demerouti et al., 2001a, b; Bakker, Demerouti, De Boer,

---

<sup>4</sup> Burnout is considered to be the multidimensional and undesirable effect of stress at work both for the employee and the organization (Maslach et al., 2001), the issue is not discussed for the needs of this report.

& Schaufeli, 2003). The high demands of work, which will increase the risk of burn-out may have a negative impact on innovation of individuals, which is in opposition to resources, which in turn through commitment to work will stimulate innovative behaviour among employees (Huhtala & Parzefall, 2007). Based on empirical analyses confirming the connection between commitment and innovation in the workplace, one should mention research by Gorgievski, Bakker and Schaufeli (2003), carried out on samples of people employed under a contract of employment and self-employed. In addition, results showed that innovation is also related to one of the dimensions of workaholism – working above the norm, which to some extent can coincide with high demands or a great amount of professional duties.

### Purpose of research

The purpose of the study is to verify the Karasek model in conjunction with commitment to work (concept by Demerouti et al., 2001a). According to the assumptions of the authors, higher work demands together with high control range condition the increased activity of the employee. Vigour, as one of the dimensions of commitment to work according to the concept by Schaufeli and Bakker (2003) adopted in this study, is undoubtedly associated with activity. Own research, in addition to the dimension of vigour/activity, also included other components of commitment, i.e. dedication and absorption. The authors assumed that a high level of control and a high level of requirements, referred to as workload, will be the predictors of commitment to work. In addition, what will also be checked are the differences between men and women in a range of variables, i.e. environmental conditions (workload and control), and components of professional engagement (vigour, dedication and absorption).

### Description of sample

In the study 748 economically active persons participated. Women were the majority 57% vs. 40% of men (approximately 3% did not declare their gender). The average age in the sample was approx. 35 years ( $sd = 10.27$ ). The average period of seniority in the company amounted to 7 years ( $sd = 7.29$ ) and occupying a given position – almost 6 ( $sd = 6.69$ ). Almost 20% of people who took part in the study occupied managerial positions. Over 17% indicated that they have a secondary education, almost 30% have a bachelor's degree and nearly 40% have a high education. On average, responders in the workplace worked extra 14.49, and in other places – 16.84 hours per week.

## Method

The study used two questionnaires. The first one by Maslach and Leiter (2000, described in Maslach & Leiter, 2011) enables the measurement of the six areas of work: workload, control, reward, employee community, justice and values. For the purposes of this study, authors included only two sub-scales, i.e. workload and control, consisting respectively of six and three statements on which the respondent has the opportunity to comment on the five-point scale from *Strongly disagree* (1) to *Strongly agree* (5). An example of the first subscale item is “*For a long time I have been working a lot and intensively*”, and in subscale control: “*I can influence superiors to improve conditions/organization of work.*”

To measure the commitment to work the authors used an abbreviated version of the questionnaire by Schaufeli consisting of 9 items forming three dimensions: vigour, dedication and absorption (Schaufeli & Bakker, 2003). The subject can respond to each statement on a five-point scale from *Strongly disagree* (1) to *Strongly agree* (5). Examples of statements of this scale are: “*When I get up in the morning, I want to go to work*” or “*At work I feel that I am bursting with energy.*”

The particulars including questions about gender, age, marital status, education, training and seniority in the company at the current position were attached to the questionnaires.

### 3. The perception of selected elements of the work environment for women and men – the analysis of workload and sense of professional autonomy and commitment – results

Table 2 shows correlations between the variables examined separately for men and women. A stronger positive correlation was observed between workload and control, vigour and dedication in the case of women and control with absorption. In the case of men, the results indicate the negative relationship of workload with absorption. Three dimensions of commitment to work are positively correlated to the same extent in both sexes.

To check the differences between men and women in terms of the level of the variables examined, i.e. workload, control, vigour, dedication and absorption the t-Student test for independent samples was used.

The results indicate a slightly lower sense of control in women compared to men, but also a greater commitment to work across all dimensions – vigour, dedication and absorption. Regarding workload no statistically significant differences (Table 3) were observed.

Table 2 *Correlations between the studied variables broken down by gender: women (n = 440)/men (n = 308)*

	1	2	3	4
Workload	—			
Control	.276**/.122*	—		
Vigour	.291**/.126*	.361**/.333**	—	
Dedication	.102*/-.028	.305**/.343**	.725**/.712**	—
Absorption	-.023/-.200*	.245**/.244**	.573**/.533**	.736**/.753**

\* $p < 0.05$ , \*\* $p < 0.01$

Table 3 *Differences in the level of measured variables between women (n = 440) and men (n = 308)*

Variable	Men	Women	t
Workload	3.13 (.84)	3.06 (.87)	- 1.07; $p = 0.291$
Control	3.45 (.96)	3.3 (.90)	- 2.05; $p = 0.004$
Vigour	3.28 (1.34)	3.5 (1.29)	2.10; $p = 0.036$
Dedication	3.51 (1.38)	3.7 (1.32)	1.97; $p = 0.049$
Absorption	3.16 (1.36)	3.4 (1.30)	2.62; $p = 0.009$

In order to determine whether interesting variables, i.e. workload and control are, and to what extent, the indicators of commitment to work, the authors used regression analysis with three explaining variables: vigour, dedication and absorption. Analyses were performed separately for men and women.

Participation of the explained variance in individual equations is not high, although statistically significant, ranging from 7–11% in the case of variable of absorption to 12–17% for vigour.

The results show a clear contribution of control in commitment to work to a very similar extent in both sexes ( $\beta = 0.27$ – $0.32$ ). What is interesting is the “behaviour” of workload depending on the explaining variable and research group. In the group of women, this variable is a significant predictor of vigour and absorption (respectively:  $\beta = 0.21$  and  $\beta = -0.10$ ), while in the group of men – only absorption ( $\beta = -0.23$ ). Interestingly, while in relation to vigour one observed positive relationship, in the case of absorption – it was negative. This means that workload can positively influence vigour, but only in women, and the same variable in both sexes will inhibit absorption. It should be noted that all three dimensions of commitment to work are clearly positively correlated at the level of 0.56 to 0.75 (whole sample – Table 2).

Table 4 *Control and workload as predictors of vigour – the results of multiple regression analysis\**

Explanatory variable	B	SE	$\beta$	p
Control	0.44/0.45	0.06/0.07	0.30/0.32	<0.001/<0.001
Workload	0.31/0.14	0.07/0.09	0.21/0.09	<0.001/0.11
	(R <sup>2</sup> = 0.17; F = 44.86; p < 0.001/ R <sup>2</sup> = 0.12; F = 20.41; p < 0.001)			

\* Results were presented separately for women (n = 440)/men (n = 308).

Table 5 *Control and workload as predictors of sacrifice – results of multiple regression analysis\**

Explanatory variable	B	SE	$\beta$	p
Control	0.44/0.50	0.28/0.08	0.30/0.35	<0.001/<0.001
Workload	0.03/-0.12	0.07/-0.07	0.02/-0.07	0.677/0.19
	(R <sup>2</sup> = 0.09; F = 22.58; p < 0.001/ R <sup>2</sup> = 0.12; F = 21.37; p < 0.001)			

\* Results were presented separately for women (n = 440)/men (n = 308).

Table 6 *Control and workload as predictors of absorption – results of multiple regression analysis\**

Explanatory variable	B	SE	$\beta$	p
Control	0.39/0.38	0.07/0.08	0.27/0.27	<0.001/<0.001
Workload	-0.15/-0.38	0.72/0.09	-0.10/-0.23	0.041/<0.001
	(R <sup>2</sup> = 0.07; F = 16.17; p < 0.001/ R <sup>2</sup> = 0.11; F = 19.43; p < 0.001)			

\* Results were presented separately for women (n = 440)/men (n = 308).

## 4. Discussion of results and conclusions

The aim of this study was to seek answers to the question of whether factors, such as, control and workload, as dimensions of Karasek's Model (1979), are associated with commitment, which, in turn, may be important in the area of innovative behaviour (see the model of Huhtala & Parzefall, 2007, cf. Dylağ & Łącała, 2014). To detect any differences in the participation of these factors and their significance for

involvement in work, analyses were performed separately for men and women. In addition, the authors compared the level of absorption, dedication and vigour in both groups.

The results of this study confirmed the hypothesis about the relationship of control and workload with involvement in work. Among the variables tested, however, self-control (autonomy) proved to be more important, as a better predictor of engagement and in relation to its three dimensions, with no major differences based on gender. In contrast, the relationship between workload and commitment – surprisingly enough – is variable. The dimensions of engagement: i.e. vigour, dedication and absorption are together clearly positively correlated, and yet, workload proved to be positively associated with vigour in the case of women, to have no significance in regard to dedication, regardless of gender, and eventually negatively affect absorption – greater in men than in women. This result implies, first of all, a need to better understand and examine the relationship between engagement with workload, and perhaps different approaches to women and men in terms of inducing commitment to work as well as creating the atmosphere leading to greater efficiency and, even, innovation.

When it comes to the differences in the level of engagement between men and women, the results showed the statistically significant higher level in women in all three dimensions of commitment to work compared with men. Although the differences are not large (not greater than one standard deviation), they are interesting because of the different results obtained in other studies. For example, Schaufeli and Bakker (2003) observed a higher level of dedication and absorption in men compared with women (no difference in the case of vigour) in a large sample of economically active people in the Netherlands (over 9,500 respondents).

In Poland, because of a greater difficulty in finding a job (see: CSO above), especially a better position, a higher level of commitment observed in women may result from the fact that work itself is of greater value for them. Women who have a job can value it more highly than men and thus do more to try and engage in the performance of their duties, to work to keep the job or get promoted. This conclusion is partially confirmed by the results of research from 2011 on women entrepreneurship in Poland carried out by the Polish Agency for Enterprise Development (PARP). The main reason for the decision to start a business by women was the need to improve the economic situation (45% of responses), and in second place – the pursuit of self-reliance and independence in deciding about their own fate (23%) (PARP, 2011, p. 48). It should be noted that the indicator of female entrepreneurship in Poland in comparison with other countries, is one of the highest. What is more, running one's own business, particularly in the beginning, takes more time, effort and energy than working "based on the employment contract," which in combination with the results concerning the time spent on housework by women in Poland (sixth result from the end of the list of 36 countries: OECD, 2014) and poor institutional support – may be perhaps a bit surprising.

A higher level of commitment to work compared with men, high rates of entrepreneurship, high place among the OECD countries in terms of time spent on housework, and, therefore, strong activity in the domestic and professional sphere of working women can also be the result of influences relating to culture and history. It is difficult to say whether generally large workload declared/analysed among women in Poland is a factor inhibiting or stimulating involvement in this group. Theoretical analysis and the results of some studies suggest that moderate levels of workload combined with high control/autonomy have activating effect on an individual. The results of this study show that there is no difference between men and women in terms of the perception of workload, but regarding a sense of control women have demonstrated its lower level relative to men. Since the control (professional autonomy) seems to be a key factor in innovation, which is emphasized in some studies on this topic (e.g. Patterson, Kerrin, & Gatto-Roissard, 2009), it may be appropriate to direct more attention of supervisors and managers to this aspect, by shaping an appropriate atmosphere in the organization (conducive to a sense of greater autonomy for women).

The general conclusion of our study is the suggestion for company managers to focus on the subjective matching of workers with the work environment, also taking into account the differences in capabilities and potential conditioned by gender and its social consequences. The needs of women and their values as well as objective burden with non-professional duties should be perceived by the management and the impact of the latter should be as far as possible alleviated at the level of organization of work. This is especially because the potential of women seems to be as significant as unused. It is both a positive and a negative conclusion from our research and our review of literature. This potential can be used provided greater autonomy and support in the work environment, while optimizing workload.

In summary, the results indicate that:

- women have a slightly higher level of commitment than men in all three dimensions: i.e. vigour, dedication and absorption,
- women regarding men declare a lower sense of control (i.e. the perceived autonomy in the workplace), which with greater non-professional load can be a barrier to women's use of their potential. There were no gender differences in terms of the perceived workload,
- the main predictor of commitment to work is to control (autonomy),
- relationship of workload with the various dimensions of commitment to work is variable and dependent on gender.

Limitations of these studies relate to the cross-sectional nature of the study, lack of data on private and home duties of respondents and the majority of women in the sample.

## References

1. ARC Rynek i Opinia (2007, sierpień-październik). *Rola kobiet w innowacyjnej przedsiębiorczości wysokich technologii*. Warszawa: Raport końcowy z badań dla Polskiej Agencji Rozwoju Przedsiębiorczości.
2. Armstrong, M. (1996). *Zarządzanie zasobami ludzkimi. Strategia i działanie*. Kraków: Wydawnictwo Profesjonalnej Szkoły Biznesu.
3. Bakker, A.B., & Bal, M.P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189–206.
4. Bakker, A.B., Demerouti, E., De Boer, E., & Schaufeli, W.B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356.
5. Bakker, A.B., Schaufeli, W.B., Leiter, M.P., & Taris, T.W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187–200.
6. Bordia, P., Hunt, E., Paulsen, N., Tourish, D., & DiFonzo, N. (2004). Uncertainty during organizational change: Is it all about control?. *European Journal of Work and Organizational Psychology*, 13(3), 345–365.
7. Bugdol, M. (2006). *Wartości organizacyjne: szkice z teorii organizacji i zarządzania*. Kraków: Wydawnictwo UJ.
8. CBOS (1993). *Postawy wobec pracy i aspiracje zawodowe kobiet*. Warszawa.
9. CBOS (2002). *Opinie o kobietach pracujących zawodowo*. Warszawa.
10. CBOS (2013). *Kobieta pracująca*. Warszawa.
11. Cooper, C.L., & Payne, R. (1987). *Stres w pracy*. Warszawa: Wydawnictwo Naukowe PWN.
12. Czapiński, J. (ed.) (2013). *Diagnoza społeczna 2013. Warunki i jakość życia Polaków*, retrieved from: [www.diagnoza.com](http://www.diagnoza.com) [accessed 1.08.2015].
13. Demerouti, E., Bakker, A.B., de Jonge, J., Janssen, P.P., & Schaufeli, W.B. (2001a). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work, Environment & Health*, 279–286.
14. Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001b). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
15. Dyląg, A., & Łącała, Z. (2013). *Regionalne zróżnicowanie innowacyjności. Uwarunkowania psychospołeczne*. In M. Trojak (ed.), *Zróżnicowanie rozwoju ekonomicznego Polski*. Kraków: Wydawnictwo UJ.
16. Dyląg, A., & Łącała, Z. (2014). Innowacyjność a zaangażowanie i wypalenie zawodowe. *Studia Prawno-Ekonomiczne*, (92), 243–262.
17. Dyląg, A., & Szafrński, M. (n.d.). *Contemporary value profiles of Polish women and men – pilot survey*. Kraków: Wydawnictwo UJ (in print).
18. Dyląg, A., Jaworek, M., Karwowski, W., Kożusznik, M., & Marek, T. (2013). Discrepancy between individual and organizational values: Occupational burnout and work engagement among white-collar workers. *International Journal of Industrial Ergonomics*, 43(3), 225–231.
19. Dziubińska-Michalewicz, M. (2007). *Kobiety na rynku pracy*. In E. Karpowicz (ed.), *Rynek pracy*. Warszawa: Wydawnictwo Sejmowe Kancelarii Sejmu.
20. Finn, C.P. (2001). Autonomy: an important component for nurses' job satisfaction. *International Journal of Nursing Studies*, 38(3), 349–357.
21. Gorgievski, M.J., Bakker, A.B., & Schaufeli, W.B. (2010). Work engagement and workaholism: Comparing the self-employed and salaried employees. *The Journal of Positive Psychology*, 5(1), 83–96.

22. Górnikowska-Zwolak, E. (2000). *Szkic do portretu Ślązaczki. Refleksja feministyczna*. Katowice: Wydawnictwo Naukowe Śląsk.
23. Graniewska, D., & Balcerzak-Paradowska, B. (2003). *Praca zawodowa-rodzina w opinii respondentek*. In B. Balcerzak-Paradowska (ed.), *Praca kobiet w sektorze prywatnym. Szanse i Bariery*. Warszawa: IPiSS.
24. GUS (2014). *Kobiety i mężczyźni na rynku pracy*. Warszawa, retrieved from: [www.stat.gov.pl](http://www.stat.gov.pl) [accessed: 10.03.2015].
25. Hakanen, J.J., Schaufeli, W.B., & Ahola, K. (2008). The job demands-resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224–241.
26. Huhtala, H., & Parzefall, M.R. (2007). A review of employee well-being and innovativeness: An opportunity for a mutual benefit. *Creativity and Innovation Management*, 16(3), 299–306.
27. Jaworek, M., & Dyląg, A. (2015). Work-related factors and age as determinants of three burnout dimensions among Polish hospital nurses. *Jagiellonian Journal of Management*, 1(1), 33–49.
28. Jaworek, M., & Dyląg, A. (n.d.). *Psychologiczne aspekty innowacyjności* (in print).
29. Karasek, R.A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, (24), 285–308.
30. Kotlarska-Michalska, A. (2001). Kobiety wielkopolskie w świetle badań empirycznych. In A. Kotlarska-Michalska (ed.), *Wizerunek kobiet*. Poznań: Wydawnictwo Naukowe Wyższej Szkoły Nauk Humanistycznych i Dziennikarstwa.
31. Kotowska, I., Sztanderska, U., & Wóycicka, I. (n.d.). *Rola Partnerstw Inicjatywy Współnotowej EQUAL w aktywizacji zawodowej kobiet*, retrieved from [www.ibngr.edu.pl/pdf/opinie/ekspertyza\\_03.07.07.pdf](http://www.ibngr.edu.pl/pdf/opinie/ekspertyza_03.07.07.pdf) [accessed: 1.08.2015].
32. Krajewska, A. (2002). Wartość pracy zawodowej i życia rodzinnego dla kobiet z małego miasta. Przykład mieszkanki Opoczna. In M. Fuszara (ed.), *Kobiety w Polsce na przełomie wieków. Nowy kontrakt płci* (pp. 180–195). Warszawa: Instytut Spraw Publicznych.
33. Lisowska, E. (ed.) (n.d.). *Gender Index – Firma Równych Szans*, retrieved from [www.wup.gdansk.pl](http://www.wup.gdansk.pl) [accessed: 20.03.2015].
34. Maslach, C. & Leiter, M.P. (2011). *Prawda o wypaleniu zawodowym: co zrobić ze stresem w organizacji*. Warszawa: Wydawnictwo Naukowe PWN.
35. Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422.
36. OECD (2014). *Better Life Index. Part: Work-Life Balance*, retrieved from <http://www.oecd-betterlifeindex.org/topics/work-life-balance/> [accessed: 20.03.2015].
37. PARP (2011). *Przedsiębiorczość kobiet w Polsce*. Warszawa: Polska Agencja Rozwoju Przedsiębiorczości, retrieved from [http://poradnik.ambas.pl/pliki/Przedsiębiorczosc\\_kobiet\\_w\\_Polsce.pdf](http://poradnik.ambas.pl/pliki/Przedsiębiorczosc_kobiet_w_Polsce.pdf) [accessed 1.08.2015].
38. Patterson, F., Kerrin, M., & Gatto-Roissard, G. (2009). *Characteristics and behaviours of innovative people in organisations. Literature Review*. London: NESTA Policy Research Unit.
39. Salanova, M., & Schaufeli, W.B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *The International Journal of Human Resource Management*, 19(1), 116–131.
40. Salanova, M., Agut, S., & Peiró, J.M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217–1227.
41. Schaufeli, W.B., & Bakker, A.B. (2003). *Work Engagement Utrecht Scale: Preliminary Manual*. Utrecht: Utrecht University.

42. Schaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315.
43. Schaufeli, W.B., Salanova, M., González-Romá, V., & Bakker, A.B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
44. Schaufeli, W.B., Taris, T.W., & Van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being?. *Applied Psychology*, 57(2), 173–203.
45. Schmitz, N., Neumann, W., & Oppermann, R. (2000). Stress, burnout and locus of control in German nurses. *International Journal of Nursing Studies*, 37(2), 95–99.
46. Śliwicki, D. (2015, październik). *Różnice w wynagrodzeniach mężczyzn i kobiet w województwach*. Warszawa: GUS.
47. Titkow, A., Duch-Krzyszczek, D., & Budrowska, B. (2004). *Nieodpłatna praca kobiet. Mity. realia. perspektywy*. Warszawa: Wydawnictwo IFiS PAN.
48. Van Harrison, R. (1987). Indywidualno-środowiskowe dopasowanie a stres w pracy. In C.L. Cooper & R. Payne (ed.), *Stres w pracy* (pp. 260–305). Warszawa: Wydawnictwo Naukowe PWN.

## Notes about the Authors

MAGDALENA JAWOREK – MA in Psychology (1999), and PhD in Management (2007), both at the Jagiellonian University; scholarship holder of The Ryoichi Sasakawa Young Leaders Fellowship Fund (Sylff), 2003; since 2012 a member of Polish Organizational Psychology Association, a partner of European Association of Work and Organizational Psychology (EAWOP); since 2013 a participant of the project *Innovative Gender as a New Source of Progress* within the Polish-Norwegian Research Programme. Research interests: antecedents and consequences of burnout syndrome, workaholism, and work engagement, work value system, psychological differences between women and men in work field.

ANNA DYLAŁ, Ph.D. – Institute of Economics, Finance and Management, the Jagiellonian University. Lecturer and researcher in the field of work psychology and management with focus on diverse aspects of individual and organizational life, as: stress, burnout, innovativeness, work engagement, values, conflicts and soft skills in management. Her theoretical works are inspired by practical experience in multicultural business environment.