

evidently, those travelling to Kolozsvár from greater distances were more likely than locals to be predestined to acquire elite positions. Transylvanian Lutherans were unlikely to become part of the elite, because as German native speakers they were less likely to appear in an encyclopedia that reflected national (Hungarian) recruitment trends. This was particularly so, given that, in the post-Trianon era, they were disinclined to come to Hungary and thus their achievements were not even considered by encyclopedias published in the country. Lutherans from other areas do better, but only just attain their representative level.

Greek Orthodox and Greek Catholic graduates did worst; those from Transylvania were practically absent from the elite, while those from elsewhere were present in just small numbers. This may be explained in part by the elite formation factors' indifference towards Romanians and in part by the objective rules of mobility. We may regard becoming part of the elite as the next step on the mobility scale – a step that is necessarily more remote for Greek Orthodox and Greek Catholic Romanians, who tend to set out from a relatively low level of school education.

On the other hand, the probability of Jews becoming part of the elite is almost twice their graduate ratio, and Unitarians are also over-represented, particularly those from Transylvania.

The fact that Catholics comprised a majority of doctoral graduates but Calvinists a majority of graduates in the elite (based on encyclopedia data) may be explained by the fact that, in contrast to the intra-university selection of students based on academic performance, the social (encyclopedia) elite was supplemented by political, public, literary and artistic elite groups, in which religious affiliation (and intra-denominational connections) was (were) more important than the possession of a doctorate.

All this could be the subject of another paper.

* * *

Analysing the religious affiliation of graduates of the two faculties of Kolozsvár University, we perceive an institution that seems to have functioned increasingly as a Calvinist centre, but where – at least during the First World War period – Transylvania's Jewish population was also over-represented, while the ethnic German population and the upwardly mobile Romanian middle classes were clearly disfavoured.

Paksi, Veronika

**Academic career of women and men in the field of natural science:
work-life balance and obstacles to professional progress**

Women on the labour market

Before the nineties, the rate of female employment was artificially high in Hungary. Women being overburdened, the traditional model of family could no longer persist. Alongside, higher qualifications became accessible for women: their education level increased and scientific career opportunities opened up for them. The higher education level offered new life perspectives, more numerous opportunities on the labour market, the possibility of success and career advancement, as well as a higher income. This new financial resources raised their

living standards, alleviated female poverty and their defencelessness within the family and society decreased. After the political system change, unemployment rose and the rate of female employees declined in total. However, the number of graduated women rose and has been steadily rising ever since.

The glass ceiling effect

In spite of the fact that some measures have been taken to facilitate equal opportunities on the labour market, career opportunities are not the same for both genders yet. At the beginning of their career, women have quite good chances for promotion, usually in middle-level positions. Due to vertical segregation their advancement mostly stops at a lower level. Often being equally or better educated, or even performing better and having more extensive experience than men, women still can not make further progress. There is an invisible limitation, the so called glass-ceiling phenomenon which blocks their upward advancement and hinders women from getting into higher level positions. Besides vertical segregation, women have to face horizontal segregation as well: in most cases they only find employment in low-paid jobs in which their gender is overrepresented. (Nagy 1997, 1999, 2001).

Family and/or profession?

Childbearing could be one of the main reasons for gender inequality in careers, which raises the question whether women having children should embark on a career at all. According to a survey carried out in Hungary in the early nineties, 40% of women who had children wanted a career provided it did not affect the family in a negative way. It should be mentioned their husbands showed some support only to make sure the family was not affected in any way. At the same time when asked what kind of problems they encountered during their career advancement, mothers first mentioned that it would be hard to maintain their family duties (Pongrácz 1996).

A survey from the late nineties (Table 1) shows that although those who are more educated prefer an equal work-life balance or less private life, two thirds of women prefer private life over career advancement. (Pongrácz 2001). In conclusion, it can be stated that Hungarian women are still family- and private life-oriented.

Table 1
The work-life balance in 1998 (%)

Education level	Private life is more important		Both are important		Profession is more important	
	Women	Men	Women	Men	Women	Men
Higher education	48	40	49	44	3	16
High or secondary school	64	45	30	40	6	16
Vocational school	66	53	29	36	5	11
Elementary school	73	57	23	39	4	4

Source: Tárki-Omnibusz 1998/2,3,4. 029.

The research

The aim of this research was to explore the attitudes towards work-life balance and childbearing of researchers in the field of natural science and the obstacles to their career advancement. The investigation⁴⁴ was carried out in a public research institute of natural sciences. The population represents 6,5% of all the researchers within public institutes in the field of natural science. The research included both female and male researchers because we believed that men also face obstacles.

Our first hypothesis was that the career advancement of researchers is mostly hindered by their struggle for a work-life balance, especially the burdens of bringing up children on female researchers. According to the other hypothesis researchers establish a family at a later age because of balancing private life and work.

Childbearing, as an obstacle to career advancement

Being well-informed and up-to-date in terms of knowledge plays a prominent role in the professional progress of researchers. The chances for education, career and mobility of female researchers who have children are more limited than those of their male colleagues. No matter how well women balance their life, a child birth hinders their self education for a while and prevents them from getting the necessary information to be on top. It is then obvious that women suffer disadvantages as a result of the above mentioned facts (Koncz 2004). Our first hypothesis is proved to be partly true after the analysis of the questionnaire. The career advancement of researchers is hindered to a great extent by the burdens of bringing up children on female researchers, but during their work, researchers face a great variety of obstacles depending on their age and gender. According to the 67% of the youngest, mostly childless women, childbearing is the biggest burden on them. Every fifth elderly woman (21%) shares the same opinion, based on their personal experiences: they observed a decreased number of their publications, refusals of scholarships and difficulties in remaining in the mainstream. Male researchers do not consider childbearing as an obstacle to their work, however, as they advance in years, the increase of family duties can affect their career, as well.

Table 2
Childbearing and family obligations as obstacles (%)

Age	Women	%	Men	%
Under 35	Childbearing	67	Childbearing	0
Between 35-49	Childbearing	21	Family obligations	40
Over 49	Family obligations	50	Family obligations	43
	Childbearing	21		
<i>Total</i>	<i>Childbearing</i>	<i>30</i>	<i>Childbearing</i>	<i>7</i>

Returning to the labour market

We will now consider the choice of researchers in terms of day care for their child under 6 years old. According to the majority of researchers it is the best for children before age 6 to be at home with both parents or just with the mother. In spite of this more than half of the

⁷ Questionnaires (n=137), in the year of 2006

researchers's children have attended nursery school and almost all of them have attended kindergarten⁴⁵. Table 3 shows their attitudes towards daycare centers.

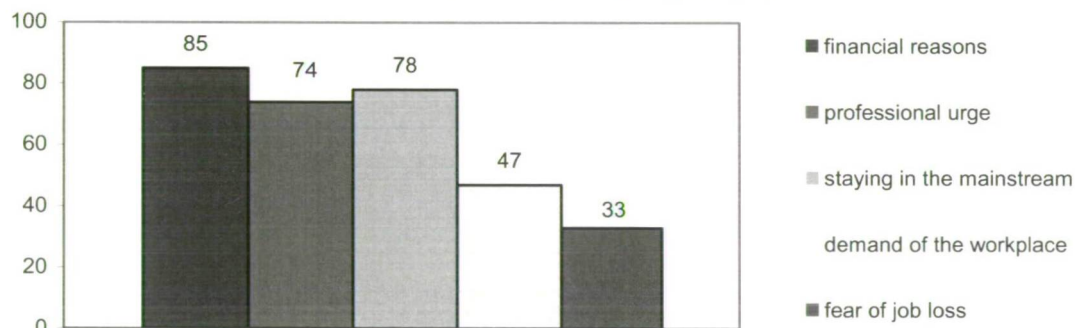
Table 3
Attending nurseries and kindergartens (%)

	Nurseries		Kindergartens	
	first child	second child	first child	second child
Children of female researchers	62	73	100	92
Children of male researchers	57	52	84	86

Several studies on the subject show that 80% of women with degree returns to work due to financial reasons (Pongrácz 2001). In the case of our female researchers this number is 85%. Chart 1 shows further details of their returning to work. Although female researchers are happy to stay at home with their child, they are concerned that the longer they stay at home to raise a child, the more likely it is for them to lose their job or miss work opportunities. Deeper analysis revealed that the younger and the middle generations are the most affected by this fear (62%).

Chart 1

Motivation of female researchers for returning to the labour market before the child reaches age 6 (%)

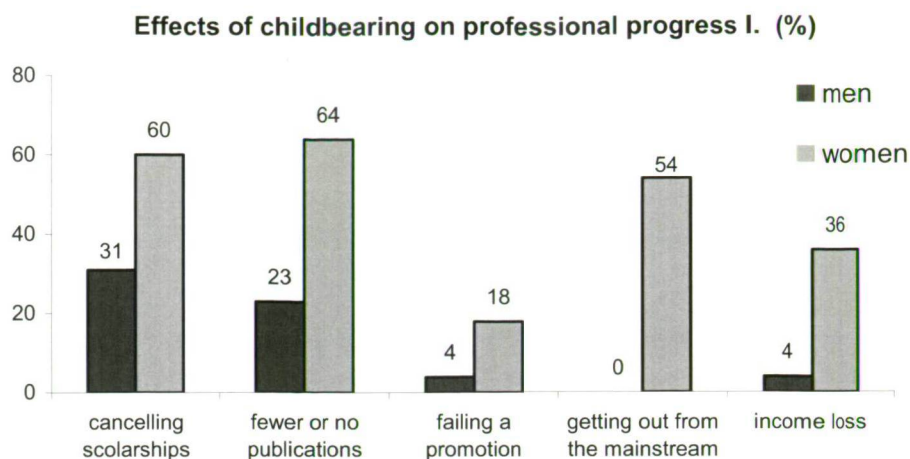


Effects of childbearing on professional progress

78% of female researchers return to the labour market earlier because they did not wish to stay out of mainstream. In spite of their efforts every second of them experienced it anyway. Moreover, every third woman suffered a considerable disadvantage to her income and almost 20% of them failed in having promotions. Having scholarships abroad provides an opportunity for professional progress in case of researchers and their achievement is measured by the number of publications they have. The lack or the decrease of them has negative effects on their professional progress. Chart 2 shows that 60% of mothers missed opportunities to gain scholarships abroad and/or have publications.

⁴⁵ There are no data concerning the amount of time the given child has spent in a daycare institute.

Chart 2



To a certain level, burdens of childbearing affect male careers, as well (positive effects: 47%, no effects: 43%), but overall, fathers do not consider them major obstacles (Table 4). In the case of mothers, they judge the effects of childbearing on their profession mainly as negative (47%) or neutral (43%).

Table 4
Effects of childbearing on professional progress II. * (%)

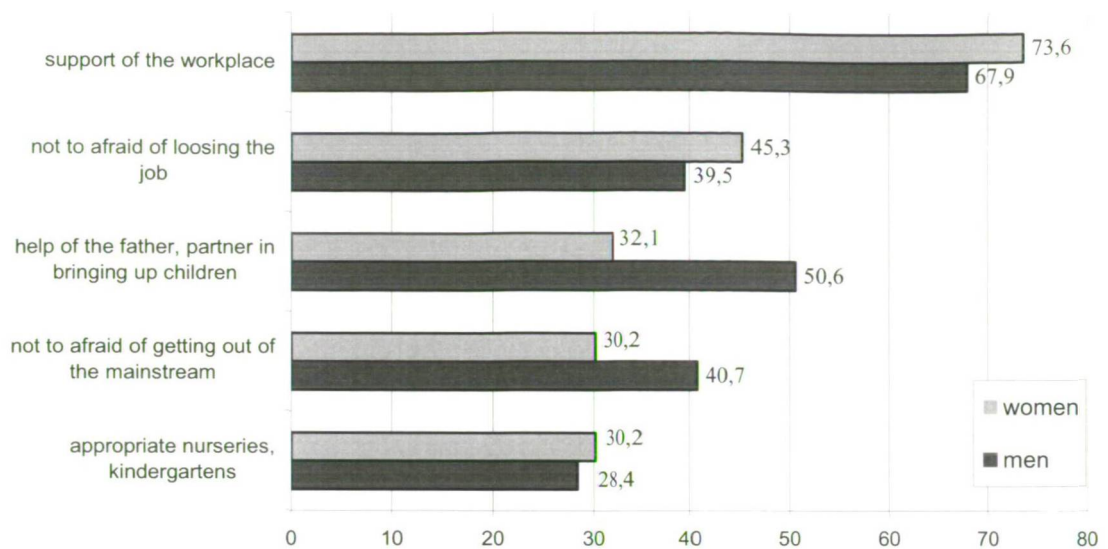
	Positive	Negative	No effect	Total
Women	10	47	43	100
Men	48	6	46	100

*the parents of children over 3.

According to the vast majority of women and men (as it is shown by bar Chart 3 below), family friendly working arrangements would mostly encourage women to raise children. The most important criterion (24,4%) of family friendly working arrangements is the possibility to work parttime (Frey 2003). However, according to our data, this possibility would help only 27% of researchers. In fact, two thirds of women who would like to work part time do not even have small children. This is actually corroborated by the Central Statistics Office data, which shows that parttime work is becoming less popular nowadays (Frey 1997). Consequently, it is very likely that female researchers would benefit more from other advantages of parttime work, like flexible working hours or the occasional possibility to work from home, etc.

Chart 3

What would encourage women to raise children?



Although fear related to job loss ranks second place in the Chart 3, we know that it is a major source of fear for two thirds of women under the age of 50 (see Chart 1). In addition, a deeper analysis revealed that women aged over 50 and young men think that women are not afraid of losing their jobs when they decide to have children. This illustrates the fact that some of the researchers do not even know about the burdens some of their women colleagues have to carry.

Further obstacles to career advancement

The dual role of supervisors

A well-balanced and supporting private background is necessary for success in any profession. This research revealed that besides the support of family (56-59%) and friends (25-30%) researchers are mostly supported by their colleagues (66-79%) and their supervisors (60-67%) in that order for both genders. Further analysis discovered that women rely on family connections as opposed to men, who rely on work connections. Supervisors are second place in rank but now we will see their role is significant in further view, as well. Besides childbearing, more serious obstacles were further revealed during the analysis, like their negative role. On the one hand supervisors give researchers significant support, but on the other hand, it is confirmed that mostly men and women between 35-49 years of age are hindered by their bosses to a great extent. So supervisors may have a significant role but dual effects. The career advancement of researchers seems to be highly determined by the attitudes of supervisors who can either be reliable partners and mentors or undermine researchers' professional success.

Lack of self-confidence and motivation

Besides childbearing and the role of supervisors an other factor plays an important role in the career advancement of researchers, namely the lack of self-confidence and motivation. Many believe that they are unable to achieve any career advancement because they do not dare or cannot make the required steps. This problem can be observed in the case of both genders in every period of their lives.

Table 5
Obstacles of researchers to their career advancement (%)

Age	Women	%	Men	%
Younger than 35 years	Lack of self-confidence and motivation	42	Lack of self-confidence and motivation	39
	Lack of advice	27	Supervisors	29
Between 35-49 years	Supervisors	58	Supervisors	40
	Lack of self-confidence and motivation	17	Lack of self-confidence and motivation	33
Older than 49 years	Colleagues	21	Supervisors	43
	Lack of self-confidence and motivation	21		
<i>Total</i>	<i>Lack of self-confidence and motivation</i>	<i>32</i>	<i>Lack of self-confidence and motivation</i>	<i>24</i>
	<i>Supervisors</i>	<i>25</i>	<i>Supervisors</i>	<i>37</i>

Establishing a family at a later age

The second hypothesis of the research was that researchers usually start a family at a later age, so that they can meet their career expectations. Starting a family at a later time is a general phenomenon within the society. It affects researchers as well, but a special view must be taken into consideration. On the one hand we can see in the basis of the next table (6) that the average age of researchers at first marriage was 26-28 years in the last decades. This has not changed significantly: nowadays, in case of researchers not older than 35, it is 26-28 years, as well. On the other hand, it seems the society has „caught up” with researchers. In the case of the generation currently over 35 years, starting a family at age of 26-28 meant a delay of 4 or 6 years, compared to the related domestic data. But due to the rising age of the first marriage within the whole society, today it is very common to get married at the age of 26-28.

Table 6
Average age of researchers at first marriage (year)

Age	Average age at first marriage			
	Pattern		In Hungary*	
	Women	Men	Women	Men
Younger than 35 years	26,7	27,5	26,0	28,5
Between 35-49 years	27,9	27,8	22,2	25,0
Older than 49 years	26,1	26,3	21,6	24,3

* own calculation based own statistical data (KSH)

Regarding the birth of the first child, almost the same progress can be observed. Although we can notice that the young generation gave birth to a child a little bit earlier than their elderly colleagues⁴⁶.

Table 7
Average age of researchers at the birth of first child (year)

Age	Average age at the birth of the first child			
	Pattern		In Hungary*	
	Women	Men	Women	Men
Younger than 35 years	27,7	27,6	25,9	-
Between 35-49 years	30,5	30,1	22,9	-
Older than 49 years	29,1	28,9	22,7	-

* statistical data for married women. Source: *Nők és férfiak Magyarországon. KSH (2005)*

It is important to note that the elder generation, women with a higher scientific degree (PhD, DSc) started a family later compared to their colleagues. The average first childbearing of women with a doctor of science degree was 33 years.

The work-life balance

As a first question, researchers were asked to estimate the importance of their private life, their household chores and work. They were also requested to estimate to what extent they were able to lead their lives accordingly. Obvious differences can be traced in the values researchers foster depending which generation they belong to: older researchers, both female and male, seem to appreciate more their professional work. The next table clearly shows that researchers spend more time working and have less private life than they wish for. They clearly fail to balance both activities: only every sixth woman and fourth man succeeded in achieving it.

Table 8
Balancing private life and work I. (%)

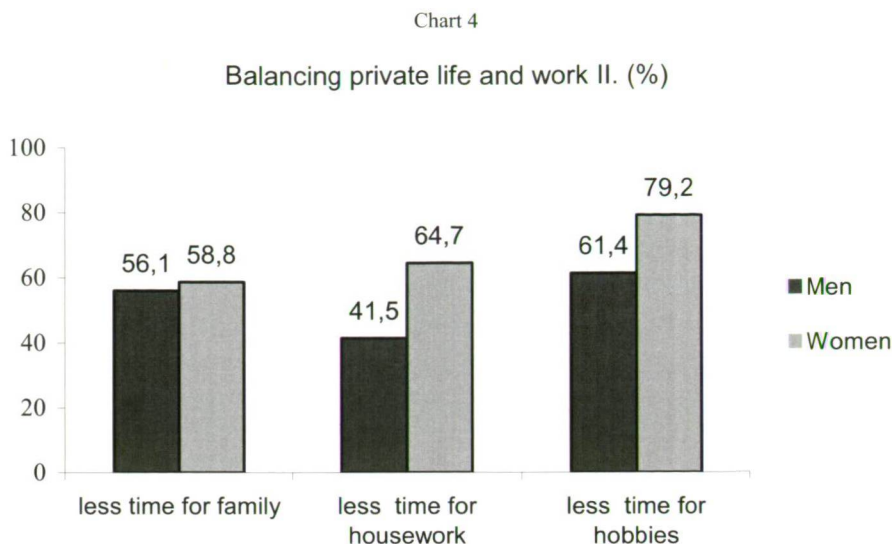
Field	Women		Men	
	Importance	Reality	Importance	Reality
Private Life	48	34	45	34
Houseworks	13	16	11	11
Profession	39	50	44	55
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

So far we have gained insight into the difficulties that natural science researchers have to face during their careers. The following part of this paper will provide informations on what reserachers think of themselves regarding their own efforts to balance private life and work.

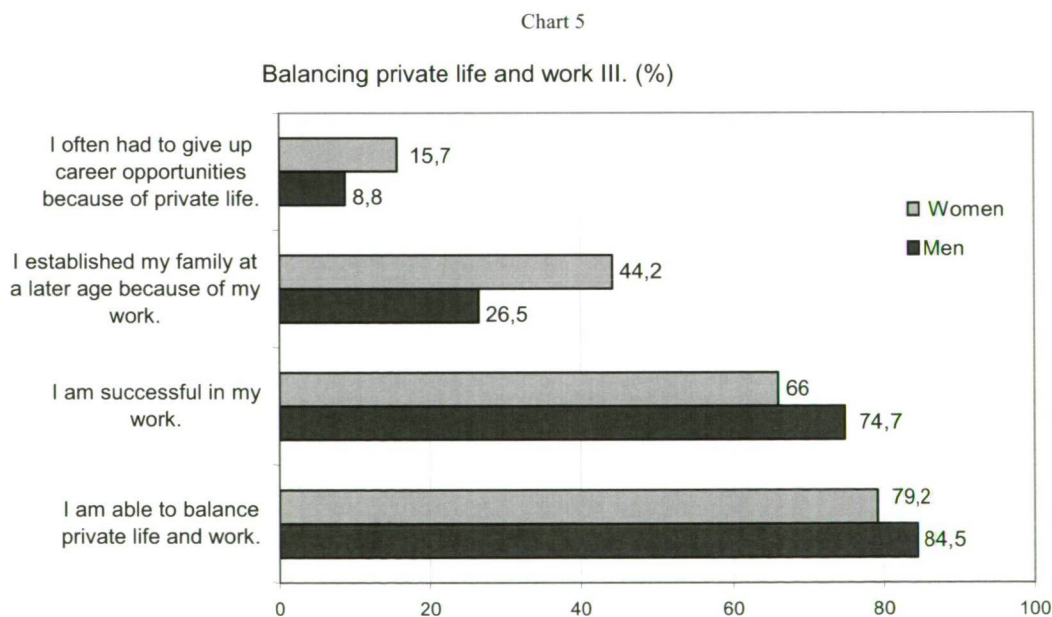
Researchers, like ordinary working people, devote part of their leisure time to work. More than 50% of them admit that they do not spend as much time with their families as they would

⁴⁶ We should take into consideration the low proportion of (married) researchers with children under age 35.

like to and they do not have enough time to do housework or pursue free-time activities. This phenomenon affects 79-87% of researchers, and this figure (see Chart 4) is much higher than the national average (Tárki-Omnibusz 2001/2a,b), which is around 10%.



As we saw earlier, researchers establish a family at age of 26-28 years. The figures in Chart 5 show that almost every second woman and every fourth man consider this age late.



In view of those above-mentioned facts, it seems that researchers find it difficult to balance private life and work. However, they claim just the opposite. In general, they do not consider this a serious problem: 80% say that they are able to balance private life and work, gain satisfaction from it and can reach considerable success. At this point a new question is raised on whether researchers can cope so well with balancing private life and work: does it have an impact on themselves and/or on their families? Or are we facing another phenomenon here, namely that they refused to admit having difficulties while they were interviewed?

Summary

The research that serves as a basis for this study revealed what impact raising a child has on professional career of natural sciences researchers, how they balance private life and work and what are the further barriers to professional development, as well.

Although researchers feel that they are able to balance private life and work, they have to cope with several problems. Regarding children, they are convinced that for a child it is best to be raised at home by parents until they reach a certain age. However, they usually decide to return to work soon after the birth of their child. It has been proved, however, that even if they return to work early, every second female researcher is no longer updated on work details, they do not get a salary increase and do not get promoted to higher positions. During the process of trying to find a solution to this problem, it was revealed that the prospect of a part-time job is not the best solution for them. For the younger generation, the most important thing – apart from raising a child – is a secure and flexible work that ensures long-term employment, professional support, and career advancement.

One of the most essential requirements for successful research work is a balanced and supportive background environment. In order to ensure this, researchers mainly rely on their colleagues, supervisors, families and friends. Barriers to the professional development and advancement of natural sciences researchers vary depending on gender and age. The younger generation has to cope with low self-confidence and the difficulties of raising a child. For the elder generation, in particular for male and female researchers aged between 35-49, their supervisor at work is considered a hindrance to professional development. It is also interesting to examine the role supervisors play in researchers' professional advancement: supervisors are either reliable partners and mentors or they undermine researchers' professional success.

Establishing a family at a later age is a general tendency in today's society. As a result, both the elder and the younger generation of researchers feel that they established their family too late. For a researcher getting married at the age of 26 or 28 and having a first child at the age of 27 or 29 was considered rather late three decades ago, however, this phenomenon does not seem unusual nowadays as society itself has 'caught up' with researchers in this respect. With regard to scientific degrees, it can be shown that the higher scientific degree (Phd, DSc) women earned in their career, the later they got married and had their first child.

Most researchers try to balance private life and work, however, in practice they are unable to achieve this. They are forced to devote a part of their leisure time to their work, which leaves them less time for themselves, for housework, and for their families. In spite of this, researchers seem to accept this situation, and they claim to be satisfied and successful in their profession.

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Szalma, Ivett

Changing opinion in the deliberation⁴⁷ groups about state role in the labour market Introduction

The goal of the present paper is to analyze how to change the opinion of the participants about the state labour market role in the deliberation groups in Kaposvár and its area. Lots of national studies show that people regard the paternalistic state as ideal (Ferge, 1996; Utasi, 2008). This phenomenon must have its roots in the socialist regime, because the state used to ensure workplace for every citizen, thus the responsibility of the individual was much lower than now. The change of the political era brought a lot of new development in this field: the dissolution of heavy industry, closures of factories and privatizations. This kind of changes triggered the phenomenon of unemployment and the employees began to feel unsafe about keeping their jobs.

At the same time there is a vivid discussion about how to make competitive the economy. Nevertheless the improving of the competitiveness in a lot of cases means to cut back the paternalistic state. This study is going to check the opinion of the participants how to change after the deliberation in the following aspects: security against the layoff, the responsibility of the state in liquidation of the unemployment and providing jobs and abolition of the black job furthermore the government should increase or decrease the taxes and they should first apply the active or the passive instruments to assist the unemployment.

⁴⁷ Deliberative Polling® is a technique which combines traditional random sampling public opinion polls with deliberation in small group discussions. The main argument behind this technique is that citizens are often underinformed about key public issues, thus traditional public opinion polls represent the public's shallow impressions on an issue. The public, according to the theory of "rational ignorance" in social sciences, does not invest time and effort in acquiring information or establishing a grounded opinion. Deliberative Polling® is aiming to use public opinion research in a new way including the possibility of public consultation. A representative sample of people is first polled on the targeted issues. Then, a sub-sample of the original sample is invited to gather at a single place for a weekend in order to discuss the issue. The participants first receive a balanced briefing material prior to this event in order to gain information on the issue and then engage in dialogue with experts and political leaders based on questions they develop in small group discussions with trained moderators. After the event, the sub-sample is again asked the original questions. The resulting changes in opinion represent the conclusions the public would reach, if people had the opportunity to become more informed and more engaged by the issues (Summary of the Results, 2008).