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# WHY DO ADULTS LEARN? DEVELOPING A MOTIVATIONAL TYPOLOGY ACROSS TWELVE EUROPEAN COUNTRIES

Boeren, E., Holford, J., Nicaise, I. & Baert, H. (Globalisation, Societies and Education, accepted for publication, Volume 10, issue 2 – 2012)

**ABSTRACT:** Nowadays, participation in adult education is considered as an individual responsibility. However, participation is the result of a complex bounded agency between individuals, educational institutions and regulating governments (Boeren et al 2010). This paper explores the motivation of 12,000 European adult learners in formal adult education in 12 European countries. Analyses show consistent patterns comparable to welfare state typologies (Esping-Andersen 1990). Further exploration makes clear that motivation to participate in an adult education course can be interpreted in relation with labour market, education and social policy in the country of participation.

**KEYWORDS:** adult education, participation, motivation, country typologies, welfare states

## 1. Introduction

This paper starts from the assumption that motivating and stimulating adults to learn throughout life is one of the main preconditions for realising a lifelong learning society and that participation is shaped in a bounded agency between the individual and the education policy and practice (Smith and Spurling 2001; Boeren et al 2010). Nowadays, adult learning is seen as a highly important lever for increasing economic performance, developing social cohesion and encouraging active citizenship. To this end, an increased participation in lifelong learning activities is seen as essential (European Commission 2000). Having reached 2010 however, we have to conclude that the Lisbon strategy has failed in many European regions (Eurostat 2009). Achieving participation rates of 12.5 percent appeared to be over-ambitious in almost all countries, with Scandinavia and the United Kingdom as the exceptions. Whereas participation targets are set at the policy level in most of the EU member states, effective

participation decisions are taken at the individual level. Motivating and stimulating adults to learn is an indispensable input, but how can this be done? Previous studies have demonstrated that awareness of the relevance of learning for one's own life is a necessary condition to achieve highly motivated adult learners (Keller 1987). Moreover, self-determined choices to participate are seen as ideal as they lead to better learning results, greater well-being, more persistence and less drop-out (Deci and Ryan 2000). Social control or putting pressure on individuals to learn is seen as ineffective. Nowadays, there is considerable evidence that motivation is malleable and can be influenced by environmental conditions and support. As stated in Lewin's Field Theory, behaviour is the result of an interaction between the person's individual characteristics and his environment (Lewin 1951). Rubenson and Desjardins (2009) argued that a decision to participate in a learning activity takes place in interaction between the overall environments in the welfare state regimes and the individual players within these countries and contexts. The motivation to participate is thus the result of bounded agency and therefore a shared responsibility among different players.

Even if motivation is generally seen as a necessarily input in order to achieve (successful) participation, few data are available to describe motivational patterns of adult learners and to analyse differences between countries in order to take the influential supportive governmental level into account (Smith and Spurling, 2001). Boeren, Nicaise and Baert (2010) developed a new conceptual framework in which they argue that participation in adult education courses is shaped as a match between (potential) learners, educational institutions and the broader structural country level. They designed their model to empirically explore participation issues based on a theoretical overview of different factors and their interrelationship. Until now, it is agreed that different national contexts affect participation levels, but we have less insight in the relation between experiences of actual participants who found their way into the system and these country level structures (Rubenson and Desjardins, 2009).

By providing an up-to-date comparative analysis, this paper aims to meet this need, starting from the assumption that motivation is indeed an individual construct which can be influenced by broader environmental structures. The main research question that we want to answer is *whether motivational patterns to participate in formal adult education differ between 12 European countries and whether*

*we can relate these different patterns to broader overall environments in the form of existing welfare state typologies.* In our approach, we want to contribute to developing typologies of lifelong learning policies and practices, to look critically at various lifelong learning models across Europe and to gain further insight into the broader institutional contexts as potential influencers of motivation. This research paper sees lifelong learning as an element of social policy and plays a role in building a strong European social model, with better working and living conditions for everyone and a steady economic growth (Holford et al 2008). Motivated adult learners are key agents in this challenge.

The paper begins by reviewing definitions of motivation as used in the international literature. Next, we give an overview of our research methodology and data collection. In a third section, we compare 18 motivational statements in 12 European countries by means of Analyses of Variance (ANOVA) and search for overall country patterns of motivation, based on cluster analysis. In our search for explanations of the variances, we refer to existing welfare and lifelong learning country typologies. The paper concludes by contrasting the empirical outcomes with the aims of current European lifelong learning policy and by making a number of recommendations.

## 2. Defining motivation

Motivation is derived from the Latin word ‘movere’ and indicates the power to move towards a goal (Coon and Mitterer 2008). An adult learner is motivated if he or she has the intention to put some efforts into his or her learning activities and to undertake actions in order to reach learning goals. In motivational psychology, we find two main research streams explaining how motivation is realised (Martens and Boekaerts 2007). First, the self determination theory makes a distinction between autonomous and controlled motivation (Deci and Ryan 2000). Autonomous motivation is self determined and a free choice at the level of the individual; controlled motivation is the result of pressure and/or compliance with external requirements. Research has shown that autonomous motivation is seen as ideal and that teachers will benefit if they try to create an autonomy-supporting environment in their classroom (Vansteenkiste et al 2009; Reeve 2002; Connell and Wellbron 1991;

Soenens and Vansteenkiste 2005). This can be done by questioning the personal interests of the learners and nurturing their personal needs. Second, the expectancy value theory starts from the assumption that motivation is the result of the interaction between the value one attaches to a learning activity and how far this activity fulfils expectancies (Vroom 1964). This theory can be compared with cost benefit analyses stating that individuals will only make efforts if the costs do not exceed the benefits of their behaviour. Keller (1987) created his ARCS model based on this expectancy value theory. Gaining attention and a positive attitude (A) towards learning, together with recognising the relevance (R) of learning for one's own life are key elements of value. Having confidence (C) in one's own abilities and in completing the course successfully is related to the expected outcomes. Finally, if satisfaction (S) in a learning process is lacking, the motivation will decrease as the learning process is not progressing as expected. As in self determination theory, motivation can be influenced by teachers and the broader learning environment such as the affinities between students, the support of educators, counsellors and career advisors, the overall organisation and clarity of the course and the openness of the organisation towards the influence of students (O'Fathaigh 1997). Keller maintains that a learning process will lead to efficiency and effectiveness if appropriately adapted learning and management strategies are implemented.

To date, researchers have focussed on mapping relations between individual learning experiences or learning results and the activities of educational institutions (Mortimore 1998; Townsend 2007; Darkenwald and Valentine, 1986). Empirical research focussing on the impact of broader social and policy environments on individual motivation is largely lacking. There are theoretical reflections on 'individualisation' such as the Third Way 'no rights without responsibilities' programme and the idea of the 'risk society' as explained by Giddens (1991) and Beck (1992). There is a broad range of empirical studies relating to motivational issues, but mainly within the field of compulsory education (see the reference section of Vansteenkiste et al 2009 for an accurate overview), but not in the adult education field, a field with mostly a non-compulsory participation (in terms of legal acts), especially in our study which focuses on formal learning activities in the formal education system – meaning that on-the-job training and courses in firms for employees were excluded.

One study we could find on adult education and the broader structural environment is the one from Smith and Spurling (2001). They have done qualitative research on broader environments which nurture personal motivation, including the role of employers, the broader institutional learning context, the characteristics of the initial education system and the family. In their attempt to integrate all these findings, they state that these levels interact with the governmental level. They based their findings on literature reviews and workshops with practitioners in lifelong learning, but they also emphasised the need for more data gathering on motivational issues among adult learners themselves. Furthermore, they state that reasons to learn can differ between employment related, community related, family related and individual related ones.

In research on motivation to participate in adult learning, Cyril Houle (1961) counts as a pioneer. Based on 22 in depth interviews, he made a distinction between goal oriented, learning oriented and activity oriented learners. Previously, research on motivational orientations towards adult education did not exist and most work undertaken after the Houle report grew out of his typology. Boshier (1973) has conducted a large scale empirical testing of Houle's work. He developed the Education Participation Scale of 48 item scale statements and conducted surveys with 60,000 adult learners in New Zealand. Morstain and Smart (1974) used the scale for a large scale survey in the United States. Other researchers have used the scale in a slightly adapted or reduced form (Doerbecker and Hake, 1979; Garst and Ried, 1999; Dia et al 2005; O'Connor 1979; Norton 2007; Baert 2010). The main outcome of all these surveys is a partial confirmation of the Houle typology, but with the caveat that these three reasons for participation – goal oriented, activity oriented and learning oriented – are rather broad and that it is necessary to define some subdimensions. For example, an activity oriented learner can participate because he or she enjoys social contacts, but also to escape from boredom at home. On an overall level, these researches clarify the differences in motivation of adult learners, but focus too much on the psychological side (Boeren et al 2010). Interactions with broader educational and governmental institutional environments are mostly absent. This observation is another argument for exploring the Smith and Spurling model (2001) in greater detail by means of motivational data. Because of its long history, the Education Participation Scale is a reliable and valid measurement

instrument which we use in a shortened form. Based on previous data reduction of the scale, we use three items of each dimension as found by Garst and Ried (1999): competency-related curiosity, interpersonal relations, community service, escape from routine, professional advancement and compliance with external influence.

After describing our methodological framework, we provide a cross-national analysis in which we will test the following hypotheses:

- Scores on motivational statements will differ by country.
- Different scores on motivational statements by countries can be explained by characteristics of the broader social and economic context. Concrete hypotheses relate to economic, labour market oriented, educational and familial structures.
  - Countries with a lower GDP will score higher on extrinsic motivation as they need to improve their overall economic level;
  - Eastern European countries will score higher on extrinsic motivation because of the transitions in their labour markets during the past 20 years and the need to catch up with the Western European countries;
  - Countries with a higher educated sample will score lower on extrinsic motivation as they are already better off;
  - Countries with an older sample will score lower on extrinsic motivation as their labour market perspectives are shorter;
  - Countries with poorer living conditions (e.g. housing) score higher on extrinsic motivation as they want to improve their overall life quality.

### 3. Methodology

We make use of a database gathered within the LLL2010 project “*Towards a Lifelong Learning Society in Europe: the Contribution of the Education System*”. This large scale study covers Austria, Belgium (Flanders), Bulgaria, Czech Republic, England, Estonia, Hungary, Ireland, Lithuania,

Norway, Russia, Scotland and Slovenia. The project aims to analyse patterns of lifelong learning in Europe and focuses in particular on the role of lifelong learning as a tool to reduce social inequalities. The overall project is divided into five subprojects. In this paper, we concentrate mainly on the third subproject which consists of a survey among 1,000 participants in formal adult education in each of the participating countries. A review of policy documents and the development of a European lifelong learning typology, to which we will refer in the results section, was the outcome of the first subproject (Holford et al. 2008).

In the survey we used stratified quota sampling. Each participating country had to survey 1,000 participants in formal adult education divided by four different levels of the current course: 250 participants at ISCED 1 and 2 level (primary and lower secondary education), 250 participants at ISCED 3 level (upper secondary education), 250 participants at ISCED 4 level (post-secondary but non-tertiary education) and 250 participants at ISCED 5 level (bachelor and master). Within each stratum, a random sample was drawn. Adult learners were identified as individuals who had left initial education for at least two years. Although we had good arguments for defining this sampling strategy, we have to be critical about some weaknesses. Most surveys questioning participation in adult education such as the Labour Force Survey or the Adult Education Survey only include adults between 25 and 64 years old, as this period of 40 years corresponds to the active life stage. Our sample included individuals below age 25 and above age 65 who had left compulsory education for at least two years. We opted for this strategy because a strict age limit possibly excludes a lot of adult learners and it would be restrictive to the principle of lifelong learning. On the other hand, it makes comparison with other surveys difficult. Furthermore, the oversampling of the lower ISCED levels in our sample - such as literacy and second chance education - should enable us to draw conclusions on hard-to-reach groups (Thyer 2001).

The questionnaire contained closed questions, mainly focussing on motivational aspects of participation, the experience of the classroom environment, the struggle with barriers and characteristics of the course such as enrolment conditions, pedagogical methods and financial costs. Questions were asked about previous learning experiences and attitudes as well as a set of typical socio-demographic and socio-economic characteristics. Learners at the lowest ISCED levels



completed the questionnaire in a face to face mode with an interviewer. In most countries, learners at ISCED levels 3 and 4 courses completed the questionnaire individually within the classroom, with a possibility to ask for help. Participants at ISCED level 5 mostly completed the questionnaire at home and returned the form by post.

In the next part of the text, we look at the empirical results. The first section describes the sample by a few key characteristics of the adult learners. The second section reports the Analyses of Variance (ANOVA) in order to map differences in motivational experiences between countries. The final section contains a cluster analysis in order to gain insight in motivational patterns of adult learners across different countries of our sample. Unfortunately, we had to discard the Norwegian adult learners because of lack of motivational data, but we can still work with 12,000 adult learners from Western and Eastern European.

## 4. Results

### *4.1. Description of the sample*

Before we start the analysis of the motivational differences between countries, we want to describe our sample based on some key variables (TABLE 1). We present descriptive statistics for gender, age, educational attainment and labour market status and look for similarities and differences between countries.

Most countries have more women than men in the sample. Bulgaria and the Czech Republic are the only two exceptions. The female shares are highest in the Anglo-Celtic countries. We hypothesize that this difference can be due to the broader focus on social aspects of the lifelong learning system (such as active citizenship and social cohesion) in this European region (Holford et al, 2008). Previous research has found that females often have a different participation pattern than males, less focused on labour market motivation and more on leisure-oriented and other goals (Houtkoop and van der Kamp 1992; Sargant and Tuckett 1999). We will test the hypotheses that in countries with higher female participation, motivation related to the social aspects of participation will be higher.

As regards age, there is a common trend that adults older than 65 were hardly sampled in the various countries. Especially in the Central and Eastern European countries, we find more adults under age 25. This is an important observation as other surveys such as the Adult Education Survey do not include this age group. In Austria, Estonia and Russia, more than half of the sampled adults belong to this group (under age 25). Flanders and the Anglo-Celtic countries have more adults aged 45 and above. We should take this into account during the analyses as it is known that older adults have on average less labour market oriented learning goals (Doets et al 2001; Belanger 1997).

Educational attainment is highest in the Flemish sample with more than half of the learners having a degree of tertiary education. Scottish and English learners in the sample are also more highly educated than those in other countries. In most Eastern European countries half of the sample consisted of learners with a lower educational attainment, indicating that they have no upper secondary qualification. This is also the case in Ireland. Having a higher qualification usually leads to less pressure to learn, more confidence in one's own abilities and a more positive attitude towards learning (Nesbit 2006; de Graaf and Wolbers 2003; Illeris 2003). On an overall level, this results in more self determined choices to participate.

Looking at labour market status, we observe that we have fewer employed adults within the Irish and Scottish sample. Job-seekers are more present in the Slovenian sample, but also in Bulgaria and Lithuania, in comparison with other countries. We have to take into account that unemployed learners have no chance to receive incentives from their employers and therefore often face higher costs to participate in learning (Allingham 2002). This skewness in the sample might be related to the country context: Anglo-Celtic countries focus their lifelong learning agenda more on social aspects of learning outside the labour market, whereas countries with a low GDP such as Bulgaria and Lithuania seem to prioritise training for the unemployed in order to increase their economical impact.

TABLE 1: sample by socio-economic background

	AU	BE	BG	CZ	EN	EE	HU	IE	LT	RU	SC	SI
<b>GENDER</b>												
male	44.5	33.6	53.3	54.1	32.3	35.6	45.2	27.6	33.8	43.2	28.5	45.5
female	55.5	66.4	46.7	45.9	67.7	64.4	54.8	72.4	66.2	56.8	71.5	54.5
<b>AGE</b>												
younger than 25	50.4	7.2	32.8	16.4	17.7	53.4	17.5	14.9	26.8	51.5	19.3	27.1
25 – 44	44.3	54.0	61.9	78.5	57.7	42.2	73.1	52.9	61.3	45.7	57.2	66.2
45 – 64	5.0	34.0	5.2	5.1	23.6	4.4	9.4	27.5	11.9	2.8	20.5	6.7
65 and older	0.3	4.8	0.2	0.0	0.9	0.0	0.0	4.7	0.0	0.0	3.0	0.0
<b>EDUCATIONAL ATTAINMENT</b>												
low	35.8	16.5	50.0	1.1	15.1	48.7	46.6	48.3	50.3	48.4	14.3	34.4
medium	56.0	32.8	38.0	82.0	54.3	37.4	42.6	34.0	42.4	42.8	58.6	61.8
high	8.1	50.7	12.0	16.9	30.6	13.9	10.8	17.6	7.3	8.8	27.1	3.8
<b>LABOUR MARKET STATUS</b>												
employed	51.3	67.7	53.8	88.6	50.0	49.3	72.9	31.3	52.1	65.3	24.7	59.4
job-seeker	12.3	9.1	16.7	3.9	3.4	3.6	11.5	9.6	19.9	6.7	3.5	32.8
inactive	36.4	23.1	29.5	7.5	46.6	47.1	15.6	59.1	28.0	28.0	71.7	7.8

AU= Austria, BE=Belgium-Flanders, BG=Bulgaria, CZ= Czech Republic, EN=England, EE=Estonia, HU=Hungary, IE=Ireland,

LT=Lithuania, RU=Russia, SC=Scotland, SI=Slovenia

## *4.2. Analyses of country differences*

### *4.2.1. Analyses of variance (ANOVA)*

In this part of the paper, we perform ANOVA, a statistical method to compare several means (Field, 2009). It is used when more than two groups are available in the dataset, requiring an alternative to the t-test. We used a shortened version of the Education Participation Scale as constructed by Boshier (1973), and analysed it statement by statement (using Likert items 1=totally disagree, 2=disagree, 3=neutral, 4=agree, 5=totally agree). First, we look at significant differences between the 12 countries in our sample, second, we run Bonferroni post-hoc tests in order to gain better insight into the ranking of these country differences. The (non)significance of results between two countries is indicated by a ‘/’ or ‘-’. The Bonferroni column ranks countries from high to low, but uses a ‘/’ if differences between countries are not significant, a ‘-’ if differences are significant. In our overview, we show the F-value of each statement too which indicates the ratio of systematic versus unsystematic variance in the dataset. Furthermore, we report the intra-class correlation score (ICC) according to which we have ordered the items: the higher the ICC, the higher the variance is due to country characteristics. In a separate table (TABLE 2), the mean scores and standard deviation on each statement by country can be found. We start by describing the ANOVA results (TABLE 3) and continue with a cluster analysis. Later on, we analyse our research output in relation to existing country typologies and social policy regimes.

TABLE 2: mean and standard deviation on motivational statements

	AU	BE	BG	CZ	EN	EE
1. to learn more on a subject that interests me.	3.77 (1.31)	4.39 (0.73)	4.06 (0.92)	3.84 (1.04)	4.15 (0.88)	4.16 (1.00)
2. to earn more.	3.38 (1.37)	2.45 (1.35)	3.65 (1.12)	3.89 (1.14)	3.31 (1.21)	3.67 (1.13)
3. because my employer required me to enrol in the programme.	1.49 (1.02)	1.30 (0.65)	3.15 (1.26)	2.40 (1.42)	1.99 (1.11)	1.77 (1.13)
4. to participate in group activities.	2.39 (1.33)	2.58 (1.20)	3.22 (1.13)	2.49 (1.14)	3.06 (1.07)	2.98 (1.21)
5. to contribute more to my community.	2.49 (1.34)	2.66 (1.15)	3.65 (1.04)	2.53 (1.17)	3.11 (1.10)	2.84 (1.19)
6. to gain awareness of myself and others.	3.04 (1.44)	3.32 (1.13)	3.63 (1.12)	2.94 (1.20)	3.45 (1.07)	3.48 (1.15)
7. to get a break from the routine of home and work.	3.14 (1.44)	2.62 (1.26)	3.17 (1.26)	2.86 (1.31)	3.00 (1.16)	3.20 (1.13)
8. to do my job better.	3.51 (1.47)	2.80 (1.40)	3.78 (1.11)	3.63 (1.17)	3.09 (1.25)	3.82 (1.23)
9. because someone advised me to do it.	2.47 (1.47)	2.15 (1.19)	2.99 (1.34)	2.83 (1.40)	2.62 (1.23)	2.65 (1.44)
10. to start up my own business.	2.64 (1.47)	1.69 (1.02)	2.94 (1.23)	2.24 (1.30)	2.13 (1.12)	2.86 (1.31)
11. because I was bored.	1.80 (1.25)	1.61 (0.89)	2.36 (1.19)	1.90 (1.19)	2.14 (1.11)	2.15 (1.26)
12. because I was obliged to do it, e.g. to claim benefits, to avoid redundancy.	1.54 (1.10)	1.28 (0.59)	3.48 (1.18)	1.90 (1.33)	1.67 (0.93)	1.71 (1.11)
13. to get a job.	2.47 (1.66)	1.95 (1.30)	3.75 (1.15)	2.88 (1.53)	2.86 (1.41)	2.98 (1.47)
14. to learn knowledge / skills useful in my daily life.	4.04 (1.16)	3.62 (1.16)	4.00 (0.97)	3.50 (1.17)	3.63 (1.17)	3.87 (1.15)
15. to contribute more as a citizen.	2.85 (1.43)	2.72 (1.21)	3.74 (1.06)	2.94 (1.24)	3.18 (1.14)	3.37 (1.17)
16. to meet new people.	2.89 (1.36)	3.19 (1.19)	3.71 (1.07)	3.41 (1.13)	3.35 (1.07)	3.61 (1.15)
17. to be less likely to lose my current job.	2.59 (1.56)	1.72 (1.05)	3.33 (1.28)	3.40 (1.37)	2.18 (1.17)	3.14 (1.39)
18. to obtain certificate.	3.30 (1.53)	3.25 (1.48)	4.25 (0.94)	3.90 (1.23)	4.07 (1.11)	4.35 (0.94)

	HU	IE	LT	RU	SC	SI
1. to learn more on a subject that interests me.	4.10 (0.85)	4.28 (0.76)	4.07 (0.86)	3.85 (1.08)	4.21 (0.72)	3.28 (1.17)
2. to earn more.	3.89 (1.02)	3.26 (1.22)	3.71 (1.01)	3.89 (1.12)	3.47 (1.13)	3.66 (1.16)
3. because my employer required me to enrol in the programme.	3.28 (1.31)	1.89 (0.98)	2.33 (1.20)	2.65 (1.42)	2.15 (1.13)	2.02 (1.17)
4. to participate in group activities.	2.89 (1.23)	3.21 (1.13)	3.21 (1.03)	2.65 (1.33)	3.12 (0.99)	2.66 (1.14)
5. to contribute more to my community.	3.11 (1.22)	3.16 (1.13)	3.11 (1.06)	3.31 (1.15)	3.36 (1.00)	3.23 (1.20)
6. to gain awareness of myself and others.	2.96 (1.25)	3.80 (0.99)	3.87 (0.97)	3.56 (1.12)	3.70 (0.93)	3.64 (1.10)
7. to get a break from the routine of home and work.	2.87 (1.25)	3.13 (1.26)	2.98 (1.21)	2.80 (1.26)	3.14 (1.19)	1.90 (1.03)
8. to do my job better.	3.80 (1.15)	3.35 (1.23)	3.72 (1.11)	3.58 (1.17)	3.29 (1.15)	3.68 (1.19)
9. because someone advised me to do it.	2.42 (1.25)	2.64 (1.22)	2.86 (1.19)	2.86 (1.25)	2.84 (1.19)	2.45 (1.20)
10. to start up my own business.	2.40 (1.24)	2.39 (1.15)	2.88 (1.17)	2.58 (1.18)	2.32 (1.11)	2.89 (1.27)
11. because I was bored.	1.60 (0.88)	2.34 (1.21)	2.34 (1.11)	2.13 (1.10)	2.49 (1.24)	1.75 (1.01)
12. because I was obliged to do it, e.g. to claim benefits, to avoid redundancy.	2.33 (1.35)	1.71 (0.86)	2.67 (1.31)	2.24 (1.37)	1.83 (1.00)	1.92 (1.17)
13. to get a job.	3.24 (1.39)	3.30 (1.37)	3.55 (1.25)	3.29 (1.47)	3.30 (1.27)	2.97 (1.50)
14. to learn knowledge / skills useful in my daily life.	4.01 (0.96)	4.09 (0.92)	4.17 (0.82)	4.00 (1.00)	3.87 (0.94)	3.68 (1.17)
15. to contribute more as a citizen.	3.37 (1.22)	3.45 (1.16)	3.57 (1.06)	3.58 (1.20)	3.41 (0.99)	3.19 (1.28)
16. to meet new people.	3.35 (1.21)	3.71 (1.03)	3.68 (1.02)	3.64 (1.17)	3.64 (0.98)	3.33 (1.21)
17. to be less likely to lose my current job.	3.43 (1.28)	2.06 (1.06)	3.58 (1.14)	2.66 (1.31)	2.15 (1.09)	2.51 (1.35)
18. to obtain certificate.	4.14 (0.96)	4.00 (1.08)	4.22 (0.91)	4.25 (0.94)	4.25 (0.88)	4.15 (1.08)

AU= Austria, BE=Belgium-Flanders, BG=Bulgaria, CZ= Czech Republic, EN=England, EE=Estonia, HU=Hungary, IE=Ireland, LT=Lithuania, RU=Russia, SC=Scotland, SI=Slovenia

TABLE 3: ANOVA on motivational statements

STATEMENTS	F	p	ICC	BONFERRONI POST HOC RESULTS
17. to be less likely to lose my current job.	236.281	.000	.397	LT / HU / CZ / BG / EE – RU / AU / SI – EN / SC / IE – BE
3. because my employer required me to enrol in the programme.	256.847	.000	.372	HU / BG – RU – CZ / LT / SC / SI / EN / IE / EE – AU – BE
12. because I was obliged to do it, e.g. to claim benefits, to avoid redundancy.	264.449	.000	.359	BG – LT – HU / RU – SI / CZ / SC / EE / IE / EN / AU – BE
13. to get a job.	114.852	.000	.235	BG / LT – SC / IE / RU / HU / EE / SI / CZ / EN – AU – BE
2. to earn more.	114.401	.000	.162	HU / CZ / RU / LT / EE / SI / BG / SC / AU / EN / IE – BE
10. to start up my own business.	91.310	.000	.142	BG / SI / LT / EE – AU / RU / HU / IE / SC / CZ / EN – BE
18. to obtain certificate.	102.995	.000	.131	EE / BG / SC / RU / LT / SI / HU / EN / IE / CZ – AU / BE
7. to get a break from the routine of home and work.	77.342	.000	.127	EE / BG / SC / AU / IE / EN / LT / HU / CZ / RU / BE – SI
5. to contribute more to my community.	88.562	.000	.121	BG – SC / RU / SI / IE / HU / EN / LT – EE – BE / CZ / AU
6. to gain awareness of myself and others.	75.944	.000	.100	LT / IE / SC / SI / BG / RU / EE / EN / BE – AU / HU / CZ

8. to do my job better.	63.105	.000	.098	EE / HU / BG / LT / SI / CZ / RU / AU / IE / SC – EN – BE
15. to contribute more as a citizen.	66.787	.000	.097	BG / RU / LT / IE / SC / HU / EE / SI / EN / CZ / AU / BE
11. because I was bored.	71.537	.000	.095	SC / BG / IE / LT / EE / EN / RU / CZ / AU / SI / BE / HU
4. to participate in group activities.	63.425	.000	.090	BG / LT / IE / SC / EN / EE / HU – SI / RU / BE / CZ / AU
1. to learn more on a subject that interests me.	90.455	.000	.085	BE / IE / SC / EE / EN / HU / LT / BG – RU / CZ / AU – SI
16. to meet new people.	46.217	.000	.062	BG / IE / LT / RU / SC / EE / CZ / EN / HU / SI / BE – AU
9. because someone advised me to do it.	34.155	.000	.058	BG / LT / RU / SC / CZ / EE / IE / EN / AU / SI / HU – BE
14. to learn knowledge / skills useful in my daily life.	39.762	.000	.045	LT / IE / AU / HU / RU / BG / SC / EE / SI / EN / BE / CZ
EXTERNAL PRESSURE DIMENSION 2 – 3 – 8 – 9 – 10 – 12 – 13 – 17	336.980	.000	.289	BG – LT / HU – RU / CZ – EE / SI – SC – IE / EN / AU – BE
SOCIAL INTEREST DIMENSION 1 – 4 – 5 – 6 – 7 – 14 – 15 – 16	55.534	.000	.064	IE / SC / LT / BG / EE / RU / EN / BE / HU / SI / AU / CZ

AU= Austria, BE=Belgium-Flanders, BG=Bulgaria, CZ= Czech Republic, EN=England, EE=Estonia, HU=Hungary, IE=Ireland, LT=Lithuania, RU=Russia, SC=Scotland, SI=Slovenia



Three items of our reduced scale have an ICC higher than .350 and share a content in which pressure and social control are clearly present. The fear of losing one's job, together with being sent to courses by the employer or external bodies, are reported more frequently in Eastern European than Western European countries. These forms of external pressure and control are least experienced in Belgium (Flanders). On an overall level, Bulgaria, Lithuania and Hungary have the highest scores. Their mean scores on the fear of losing one's job are higher than 3, indicating that they are close to agreeing (Likert score 4) and do not disagree (Likert score 2) with the statement.

The influence of the employer is strongest in Bulgaria with an average score of 3.65. Bulgaria is also the only country with a mean score higher than 3 on the obligation due to claiming benefits and avoiding redundancy.

The following two statements are work related, measuring the wish to get a job and earn more, and are also selected more frequently in Eastern European countries, although getting a job seems more important in Ireland and Scotland in comparison with the other Western European countries. Again, Flemish learners have the lowest mean scores on these items and following the Bonferroni post hoc tests, they significantly differ from other Western European countries. On the item 'to earn more', Flanders is the only country with a mean score lower than 3, indicating that Flemish learners on average disagree with the statement. On the item about getting a new job, they even score lower than 2.

Within all countries, the mean scores on starting up a business are below 3, indicating that this is not really a reason for most of our sampled adult learners. Again, the mean score is highest in Bulgaria and lowest in Flanders. The item on obtaining a certificate has one of the highest mean scores among all items in most countries. This is not surprising as the opportunity to obtain a certificate is one of the main characteristics of formal education. In 9 out of 12 countries, the mean score is higher than 4. In Austria and Belgium, this reason is less prominent than in other countries, but in comparison with the other statements, the score is yet rather high and obtaining a certificate is thus also an important motivation for them.

The next three statements differ from the previous statements in that they are less linked with external or work related pressure. Escaping from routine, contributing to the community and gaining awareness

of oneself and others are items in which the logic division between Eastern and Western European countries is less clear-cut. The need for a break from routine and home is less prominent in Slovenia, but in other countries rather neutral with an average score of around 3. In the statement on the contribution to the community, we see again a lower score for Austria and Belgium, together with Czech Republic. The aspect of gaining awareness of the self and others has slightly higher mean scores (closer to 4) in countries as Ireland, Scotland and Lithuania.

The statement relating to doing the job better is another example where pressure is present. Again, we see a distinction between Eastern and Western European countries. Belgium is the only country with a score lower than 3, indicating that they disagree with the statement.

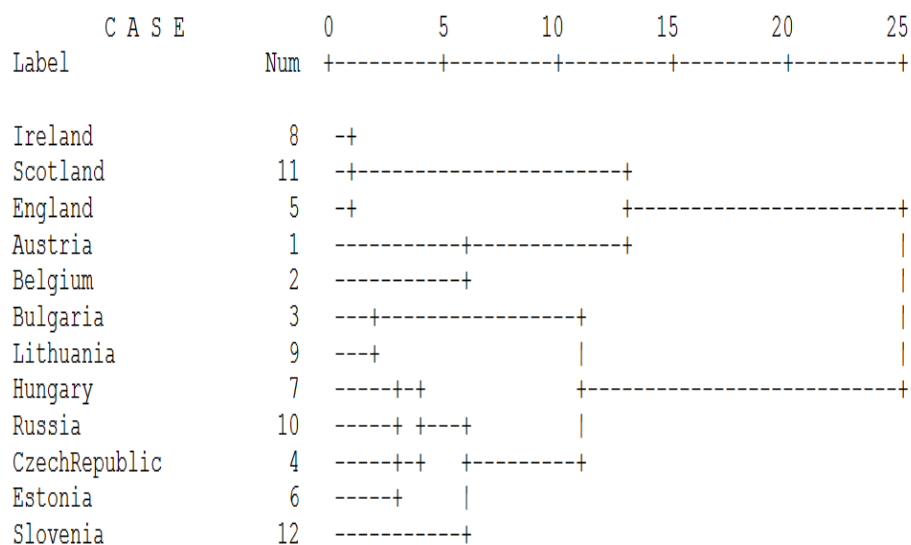
The remaining statements, with the exception of statement 9, focus more on the social aspects of learning and the search for fulfilling personal interests. The differences between countries become less significant. In comparison with the earlier items, learners in Scotland and Ireland are in between of the Eastern European countries, whereas the difference remains significant between the Anglo-Celtic region on one hand, and Austria and Belgium on the other. If we perform data reduction on all 18 statements and make a distinction between external pressure and social interest, we notice that a dimension measuring external pressure is much more different between countries. The added value of countries in explaining social motivation is smaller.

#### *4.2.2. Cluster analysis*

Besides looking at significant effects statement by statement, we are also interested in the patterns we find in all items together. Upon combining the Bonferroni post hoc test results with the ANOVA, one observes a basic distinction between Western and Eastern European countries. The Eastern European adult learners in our sample participate more because of external pressure, while those in Western European countries rather want to learn more about an interesting topic. In the Anglo-Celtic countries, social motivation is stronger than in the continental countries. To make these convergences and differences more visible based on all 18 items, we perform a cluster analysis (FIGURE 1), using Ward's method, which follows a quite similar approach to the ANOVA technique (Ward, 1963). We

will look at the dendrogram, which indicates the proximity of countries based on motivational data. We will make separate sub clusters of countries that fit ‘closest’ to each other. The distance between countries is indicated on a scale from 0 till 25 (see horizontal line above in figure 1). The smaller the distance between countries, the more similar they are.

FIGURE 1: cluster analyses on motivational statements



At first sight, we do indeed notice a distinction between Western and Eastern European countries. If we would choose for making two clusters, we should clearly have those two. Looking at the vertical line under 25 (at the upper horizontal line - related to large difference) and moving to the left, one can notice two main clusters (as two main horizontal lines go to the left): Europe divided by West and East.

In our case, we can identify further sub-clusters within those two main clusters. Among the Western European countries, we find an Anglo-Celtic cluster and a Continental cluster with Austria and Belgium (look at the first vertical line below 10-15 and move to the left, two clusters will be found: Ireland, Scotland and England versus Austria and Belgium) In our ANOVA table, we notice that the first items focussing on external pressure were less present in Austria and Belgium and that the social motivation was slightly more prominent in the Anglo-Celtic ones, especially in Ireland and Scotland. Among the Eastern European countries, Bulgaria and Lithuania take distance from the other countries

in the sample (look at the second vertical line below 10-15 and move to the left, two clusters will be found: Bulgaria and Lithuania versus Hungary, Russia, Czech Republic, Estonia and Slovenia). Based on the mean scores, we observed that external pressure and job related obligations are the highest in these countries (Bulgaria and Lithuania). Within the cluster of other Eastern European countries, Slovenia stands more on its own, but it is debatable if a separate cluster is really needed.

At the end of this section, we have to be critical about the use of our research methodology. We used a shortened version of the Education Participation Scale of Boshier (1973) and did not give our respondents the opportunity to insert their own thoughts. This approach is satisfactory for searching for overall patterns as we do in this paper, but could be strengthened by additional qualitative research methodologies. E.g. biographical research methods emphasis on the analysis of subjective experiences of individuals in their social context and offer a more detailed insight in the learning experiences of individuals, including their interrelations with other parts of life (Roberts 2002).

Because of limitations (time and resources) we were not able to conduct a qualitative part and thus have to work further with insights from quantitative analyses.

#### *4.3. Explanations based on welfare state typologies*

In the previous parts of this result section, we have looked at ANOVA and cluster analysis results. In this part of the paper, we will try to explain and interpret these findings.

Overall, the results provide support for the view that broader environmental structures at country level interfere with motivation to learn throughout life. As indicated in Boeren et al (2010), participation issues are shaped as a match between different players. In this case, the systematic differences in motivation patterns between clusters of countries suggest that the matching between demand and supply is influenced by the national institutional context, as formulated in our first hypothesis. The cluster analysis presented above revealed four distinct groups: two Western European sub-clusters and two Eastern sub-clusters. Interestingly, our clustering of countries is the more or less comparable with

previous country clustering based on welfare and educational indicators (Titmuss 1974; Esping-Andersen 1990; Aiginger and Guger 2006; Fenger 2007; Holford et. al. 2008). Societies are structured according to patterns in their family and working life and based on common national identities. Previous research has tried to cluster countries based on welfare state characteristics such as the level of decommodification and stratification (Esping-Andersen 1990). Decommodification refers to how far the welfare services follow a free market organisation. In countries with a high degree of decommodification, social security is unrelated to individual positions on the labour market and social services are guaranteed to every citizen, whereas countries with low decommodification rely more on the market. Stratification indicates how far social inequalities between individuals are being maintained or eliminated. The social-democratic model (Scandinavian countries) addresses social needs without reference to the market, the corporatist model (Belgium, Austria, France, Germany, ...) relates social security to merit and productivity, and derives benefits from social contributions paid on labour earnings. In the liberal model (United Kingdom, Ireland), the state will only contribute where the market fails to secure the social rights of the population.

Within this paper, we compared reasons to participate in 12 countries, including seven Eastern European countries. Esping-Andersen's 'The three worlds of welfare capitalism' however, does not include Eastern European countries and has little focus on educational indicators. Therefore, we build on the work of Holford et al. (2008), who compiled their own lifelong learning typology based on variables measuring human capital, social capital and fostering of personal development, and on how much participation in lifelong learning was used within active labour market policies. And – besides the inclusion of education variables, it includes a set of Eastern European countries. The typology was constructed as part of the same LLL2010 project used within this empirical paper (see methodology section). Holford et al. (2008) gathered their data by using National Reports produced by team members and by consultation of statistical and policy reviews by Eurostat and Eurydice. Furthermore, we use the Holford typology as it consists of the same set of countries we use in our dataset (we excluded Norway because of data limitations).

Holford et al. (2008) argue that a strong labour market focus is present in almost all national lifelong learning policies, although the interpretation varies. In the post-communist European countries, there is a stronger emphasis on enhancing economic development and decreasing the gap with other regions, whereas in Western European countries the emphasis is mainly on maintaining the economic level and solving skills shortages. Furthermore, lifelong learning is seen as a way to integrate disadvantaged groups into society, although the labour market focus remains dominant. Especially in Ireland, lifelong learning is sometimes seen as a promoter of culture, identity and well-being. The education system has a strong link with lifelong learning practices and changed radically in Eastern European countries after the collapse of communist rule. In Eastern countries, a specific lifelong learning policy does not exist or is little more than an uncritical copy of a Western European policy (Holford et al 2008). Some other countries such as Estonia, Slovenia and Hungary have some recently developed policy papers on lifelong learning. In the Western European countries, there is much more evidence on lifelong learning policy and the role that education policy has to play. In these old member states with longer established market economies, National Qualification Frameworks are already more strongly developed whereas this evolution still has to start in the majority of Eastern European countries. In many Eastern European countries such as Bulgaria, the Czech Republic, Hungary, Lithuania and Slovenia, the focus on socially disadvantaged groups mainly relates to the Roma population with the aim of increasing their employment rate. In Western European countries, there is a focus on Asylum seekers learning the native language of the country in which they want to live.

Based on indicators mapping economic and education progress, Holford et al. developed the following lifelong learning typology:

- The first group consists of an Anglo-Celtic group (Scotland, England and Ireland) with a relatively high GDP but with a lower social focus resulting in a higher poverty risk. Here, the participation in lifelong learning is rather high and focuses on economic prosperity. In Irish lifelong learning policy, combatting social exclusion is also an explicit concern.

- The second group is the continental group (represented here by Austria and Flanders). They have stratified education systems and strongly regulated labour markets, but fail to include marginalised groups. This is also reflected in their lifelong learning systems.
- The third 'catching up' group is a rather heterogeneous group of Eastern European countries transforming into market economies. Participation rates in lifelong learning are low and the debate focuses strongly on economic growth. Combatting social exclusion by means of lifelong learning is largely lacking. Of all these countries, Slovenia is most similar to the Western European countries. Furthermore, the authors argue that further investigation in Eastern European lifelong learning systems could reveal a deeper insight in variance within this region.

If we try to relate our research findings to this typology of Holford et al (2008), we clearly find some similarities. At the Western side of Europe, we notice an Anglo-Celtic cluster where motivation of adult learners reflect an average focus on work related items and a stronger focus on social aspects than within the Continental countries. This was also indicated in the table on which Holford et al constructed their typology and thus confirms the available literature and indicators. In liberal regimes, adults feel a bit more external pressure than within continental conservative regimes with stronger labour market regulations. The lack of attention for social aspects in the continental countries is also reflected in the motivation of their adult learners.

At the side of the Eastern European countries, there is a need for some interpretations why Bulgaria and Lithuania form a separate subcluster. An IMF report on labour market transformations in Central and Eastern European countries shows that Bulgaria and Lithuania are two countries having a slower progress in transforming from centrally planned economies into the market based economies (Schiff et al 2006). They have the lowest GDP, a lower private investment rate, lower domestic savings and have stronger decreases in labour market participation rates. Furthermore, their total productivity is lower and the agriculture sector is still rather dominant whereas other countries already shifted from an agriculture society into a service based society. Besides these economic indicators, we can refer to further statistics as gathered in the Second European Quality of Life Survey (Anderson et al 2009). In

comparison with other European countries, adults in Lithuania and Bulgaria indicate a lower overall life satisfaction, a lower overall happiness, a lower match of life circumstances to aspirations and more difficulties in concentrating at work because of family responsibilities. Although more adults own a house, especially in Bulgaria, they have fewer rooms / living spaces available and are less satisfied with the quality of their living conditions. They experience shortage of space and have less comfort such as a separate bathroom and indoor flushing toilets. There is more crime and violence, a poorer indication of general health conditions and the mental health. The quality of the education system is perceived as low and the overall trust in political institutions is rather lacking. On an overall level, we can conclude that nearly all Eastern European countries are catching up economically and socially, but that Lithuania and Bulgaria are lagging further behind. Translated into lifelong learning motivation, more external and labour market oriented pressure is experienced.

## 5. Discussion

In this paper, we searched for motivational patterns among adult learners in 12 European countries. As suggested by Smith and Spurling (2001), sound motivational learning strategies led by governments are needed in order to achieve the lifelong learning society. As potential key agents, they refer to employers, learning institutions and families. Our analysis points to some common patterns of influences that we can recognize nowadays.

### *Labour market*

Employment and labour market influences are clearly visible. The pressure for learning is the highest in countries which have a delay in transforming to strong market oriented economies. Looking at sectors of employment, we notice that within Bulgaria and Lithuania, agriculture is still dominant (Holford et al 2008). In other Eastern European countries, there is on average also more agricultural employment than in the Western European countries. In the UK, Ireland, Austria and Belgium, service employment, market as well as non-market oriented, is much more present. The structure of the labour



market and its chances to participate in lifelong learning are also reflected in our results. The continental countries Austria and Belgium have a rather stratified structure in which having a job strongly determines access to welfare services. Curiously, those who participate in formal adult education feel *less* job related pressure and experience a space for participating because of an intrinsic interest in the topic of their study. This might be related to the lack of on-the-job training and other training courses for employees in firms within our research study. Belgium in particular scores low on all pressure and job related statements, but the sample also showed that half of the adult learners already had a higher educational attainment. The reverse side of the coin may be a limited impact of lifelong learning on social inclusion. Therefore, wider access to learning and the creation of appropriate learning opportunities for marginalised and disadvantaged groups remains a key point of attention.

#### *Education system*

Concerning the influence of the education system, Holford et al (2008) already stated that although in most countries lifelong learning is the responsibility of the Ministries of Education, there are close links with labour and employment departments. Although the European policy on lifelong learning is focussing on personal development, employment, social inclusion and citizenship, labour market oriented training predominates in practice, especially in Eastern European adult education systems. Looking at the public education systems, we notice a rather strong link between the compulsory and the adult education system. In our sample, Belgium and Austria were the only countries with stratified compulsory systems, characterised by early tracking and a strong differentiation between academic and vocational options. In our motivational analyses, adult learners within these countries showed the least job related motivation. It is plausible that students in stratified systems received more specialised education due to the fact that they had to make their final learning choices earlier. As a result, more adolescents entering the labour market are specifically trained in one profession which makes additional training a less urgent need (Brunello 2001). Furthermore, it is worth paying attention to the radical changes of the education systems in the Eastern European countries since their transition to the

market economy. Hantrais (2002) warns that the new system is much more inegalitarian, and in our database we find indeed a lot of unqualified youngsters under age 25 within these countries.

Looking at the length of compulsory education, we can state that Flanders is the only region in our sample where adolescents have to participate in at least part time education until the age of 18 (Eurydice 2010). Job related motivation was mentioned least in this region. In countries with strong job related motivation – Lithuania, Bulgaria – compulsory education ends at the age of 16. This is not exceptional as it is the case in most other European countries: compulsory education ends at age 15 or 16. The main problem with Lithuania and Bulgaria however, is that compulsory education only starts at the age of 7, while in other countries such as England and Scotland compulsory education starts already at age 5. This means that Lithuanian and Bulgarian adolescents spend 2 years less in the education system, which may increase their needs for job related training during adulthood.

Nevertheless, we cannot say that pupils in compulsory education have different skill levels at the same age or stage of their schooling, compared to our clusters. The latest results on the Progress in International Reading Literacy Study (PIRLS) suggest that reading abilities of pupils in the fourth year of primary school do not differ between Flanders and Bulgaria (both obtained a mean score of 547) (Van Damme 2008). In this research, Lithuanian pupils perform significantly better than Scottish pupils (537 versus 527). Also in TIMSS (Trends in International Mathematics and Science Study) Lithuanian pupils score better than Scottish learners both in sciences and mathematics, both in the fourth grade of primary school and the second grade of secondary school (Van den Broeck et al 2004). Note that a country like Lithuania made a lot of progress in learning results among pupils in the last 15 years. While the average TIMSS scores on mathematics and sciences decreased by 13 and 17 points for Flanders, the mean scores for Lithuania increased by 30 and 56, respectively. Similarly to labour market changes, we can assume that the quality of the schooling system is also adapting to the Western norms. Furthermore, we notice that by the end of compulsory education (at age 15), the performances of pupils in Bulgaria and Lithuania decrease in relation with other European countries. These results can be consulted in PISA studies (Programme for International Student Assessment) (De Meyer 2007; OECD 2007).

*Family structures*

The Life Values Survey provides information on the potential influence of the family. On an overall level, family size is larger in Eastern Europe, but the quality and space of their living conditions are much smaller. Especially in Lithuania and Bulgaria, poor conditions are reported. It is possible that lifelong learning is a tool for them to escape from these non-desirable situations. Furthermore, the happiness is lower in Eastern Europe and again especially in Bulgaria and Lithuania. Overall societal problems such as crime and violence are more prevalent there. Although lifelong learning can play a role in remedying these social problems, learning motivation such as ‘contributing as a citizen to the community’ or ‘gaining better awareness of the self and others’ do not differ much between welfare state regimes. This observation suggests that lifelong learning policy should pay more attention to creating new opportunities in order to increase the overall well-being and life happiness of the population, besides serving the economy.

To conclude, we want to raise the question whether a common European lifelong learning policy is desirable. Our research has demonstrated that lifelong learning motivation emerges as ‘bounded agency’ between different countries and their individual adult learners (Rubenson and Desjardins 2009). Participation is not solely the responsibility of the learners themselves, but takes place in interaction with broader structural conditions at the level of a country or geographical area.

Western and Eastern European countries differ from a social as well as economic and educational perspective. This suggests that there is a need to implement different strategies to boost the motivation of adults to learn at the separate country level – besides the common European level. Even within Eastern Europe, we have noticed different levels of catching up with the Western market economy (e.g. Lithuania versus Slovenia). From a psychological point of view, it would be helpful to improve the knowledge on motivation among policy makers as social control and pressure may destroy self-esteem. In our database collected in the LLL2010 project, in further analyses, we notice that learners in countries with more pressure to participate are also less satisfied with various aspects of their courses (practical organisation, learning outcomes) than those in countries with less pressure.

The analysis suggests that countries should adapt their education systems in order to attract more motivated learners – and to keep them satisfied. More flexible enrolment conditions, strong national qualification frameworks and more accreditation of prior (experiential) learning can lower barriers and improve the learning success. And last but not least, education policies should focus on lifelong learning as a tool to create more human warmth and happiness, especially in those countries where adults report low life values. A strong lifelong learning society has to build on European as well as regional long-term motivational strategies.

## SOURCES

Aiginger, K. and Guger, A. 2006. The European Social Model: from obstruction to advantage. *Progressive Politics* 4:3.

Allingham, M. 2002. *Choice Theory: A very short introduction*. London: Oxford Press.

Anderson, R., Mikulić, B., Vermeylen, G., Lyly-Yrjanainen, M and Zigante, V. 2009. *Second European quality of life survey overview*. Dublin: European Foundation for the improvement of living and working conditions.

Baert, H. 2010. Perspectives for non-participation in work-related lifelong learning activities. ESREA 2010 conference Linköping.

Beck, U. 2002. *Risk society: towards a new modernity*. London: Age.

Bélanger, P. 1997. *New patterns of adult learning: a six-country comparative study*. New York: Pergamon Press.

Boeren, E., Nicaise, I. and Baert, H. 2010. Theoretical models of participation in adult education: the need for an integrated model. *International Journal of Lifelong Education* 29, 1: 45-61.

- Boshier, R. 1973. Educational participation and dropout: A theoretical model. *Adult Education*, 23: 255–282.
- Connell, J. P., and Wellborn, J. G. 1991. Competence, autonomy and relatedness: A motivational analysis of self-system processes. In *Self processes and development* ed. M. R. Gunnar and L. A. Sroufe, 43–77. Hillsdale, NJ: Erlbaum.
- Coon, D. and Mitterer, J. O. 2008. *Psychology: A Journey*. Belmont, CA: Wadsworth.
- Brunello G. 2001. 'On the Complementarity between Education and Training in Europe', *IZA Discussion Paper* No. 309.
- Darkenwald, G. G. and Valentine, T. 1986. Measuring the social environment of adult education classrooms. Paper presented at the Adult Education Research Conference, in Syracuse, NY.
- Deci, E. and Ryan, R. 2000. The 'what' and 'why' of goal pursuit: Human needs and the self-determination of behaviour. *Psychological Inquiry* 11: 227–268.
- De Graaf, P. and Wolbers, M. 2003. The effects of social background, sex and ability on the transition to tertiary education in the Netherlands. *The Netherlands' Journal of Social Sciences* 39, 3:172–201.
- De Meyer, I. 2007. *Wetenschappelijke vaardigheden voor de toekomst. De eerste resultaten van PISA 2006*. Gent: vakgroep onderwijskunde.
- Desjardins, R., Rubenson, K. and Milana, M. 2006. *Unequal Chances to Participate in Adult Learning International perspectives*. Paris: UNESCO.
- Dia, D., Smith, C., Cohen-Callow, A. and Bliss, D. 2005. The education participation scale-modified: evaluating a measure of continuing education. *Research on Social Work Practice* 15, 3:213-22.
- Doerbecker, C. and Hake, B. 1979. Educatieve motivaties, educatieve behoeften en de activering van de vraag naar educatie (educational motivation, educational needs and the activation of the demand of education). *Tijdschrift voor Agologie* 8,3:187-206.
- Doets, C. Hake, B. and Westerhuis, A. 2001. *Lifelong learning in The Netherlands. The state of the art in 2000*. Hertogenbosch: Cinop.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press.
- European Commission. 2000. A memorandum on lifelong learning. Brussels: European Commission.
- Eurostat (2009) Lifelong Learning Statistics website.  
[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Lifelong\\_learning\\_statistics](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Lifelong_learning_statistics)

- Fenger, H.J.M. 2007. Welfare regimes in Central and Eastern Europe: Incorporating post-communist countries in a welfare regime typology. *Contemporary Issues and Ideas in Social Sciences*, 1-30.
- Field, A. 2009. *Discovering statistics using SPSS*. Thousand Oaks: SAGE.
- Garst, W.C. and Ried, L.D. 1999. Motivational orientations: evaluation of the educational participation scale in non-traditional doctor of pharmacy program. *American Journal of Pharmaceutical Education* 63:300-304.
- Giddens, A. 1991. *Modernity and self-identity. Self and society in the late modern age*. Cambridge: Polity.
- Hantrais, L. 2002. Central and East European States Respond to Socio-Demographic Challenges. *Social Policy and Society* 1, 2:141-150.
- Holford, J., Riddell, S., Weedon, E., Litjens, J. and Hannan, G. 2008. *Patterns of lifelong learning. Policy & practice in an expanding Europe*. Wien: LIT Verlag.
- Houle, C. O. 1961. *The Inquiring Mind*. Madison, WI: University of Wisconsin Press.
- Houtkoop, W. and Van Der Kamp, M. 1992. Factors influencing participation in continuing education. *International Journal of Educational Research* 17:537-547.
- Illeris, K. 2003. Towards a contemporary and comprehensive theory of learning. *International Journal of Lifelong Education*, 22:396-406.
- Keller, J. M. 1987. Strategies for stimulating the motivation to learn. *Performance and Instruction*, 26,8:1-7.
- Lewin, K. 1951. *Field theory in social science: Selected theoretical papers*. New York: Harper & Row.
- Martens, R.L., Boekaerts, M. 2007. *Motiveren van Studenten in het Hoger Onderwijs*. (Motivating Students in Higher Education). Groningen: Wolters-Noordhoff.
- Morstain, B.R. and Smart, J.C. 1974. Reasons for participation in adult education course: A multivariate analysis of group differences. *Adult Education*, 24, 2:83-98.
- Mortimore, P, 1998, *The Road to Improvement*. Lisse, Swets and Zeitlinger.
- Nesbit, T. 2006. What's the matter with social class? *Adult Education Quarterly*, 56,3: 171-187.
- Norton, S.P. 2007. The new reality: participation of elected government officials of the state of Kansas in emergency management training post. Dissertation, Kansas State University.
- O'Connor, A. 1979. Reasons nurses participate in continuing education. *Nursing Research* 28:354-9.

- OECD 2007. *PISA 2006 science competencies for tomorrow's world*. Paris: OECD.
- O’Fathaigh, M. 1997. Irish adult learners’ perceptions of classroom environment: some empirical findings. *International Journal of University Adult Education* 36,3:9-22.
- Reeve, J. 2002. Self-determination theory applied to educational settings. In *Handbook of self-determination* E. L. Deci & R. M. pp.183–203. Rochester, NY: University of Rochester Press.
- Roberts, B. 2002. *Biographical research*. Buckingham/Philadelphia: Open University Press.
- Rubenson, K. and Desjardins, R. 2009. The impact of welfare state regimes on barriers to participation in adult education: A bounded agency model. *Adult Education Quarterly* 3:187-207.
- Sargant, N. and Tuckett, A. 1999. *Marking time. The NIACE survey on adult participation in learning 1999*. London: NIACE.
- Schiff, J, Egoume-Bossogo, P., Ihara, M., Konuki, T. and Krajnyak, K. 2006. Labor market performance in transition; the experience of central and eastern european countries. *IMF Occasional paper* 248.
- Smith J. and Spurling A. 2001. *Understanding Motivation for Lifelong Learning*. London: Campaign for Learning.
- Soenens, B. and Vansteenkiste, M. 2005. Antecedents and outcomes of self-determination in three life domains: the role of parents’ and teachers’ autonomy support. *Journal of Youth and Adolescence* 34:589–604.
- Spicker, P. 2008. *Social policy: themes and approaches*. Bristol: Policy Press.
- Thyer, B. 2001. *The Handbook of Social Work Research Methods*. Thousand Oaks: SAGE.
- Titmuss, R.M., 1974. *Social Policy*. London: George Allen and Unwin.
- Townsend, T. (Ed). 2007. *The International Handbook of School Effectiveness and Improvement*. Dordrecht and New York: Springer.
- Van Damme, J. 2008. *PIRLS 2006: Vlaanderen in de wereld*. Leuven: CO&E.
- Van den Broeck, A., Van Damme, J., Brusselmans-Dehairs, C. and Valcke, M. 2004. *Vlaanderen in TIMSS 2003*. Leuven/Gent: CO&E/vakgroep onderwijskunde.
- Vansteenkiste, M., Sierens, E., Soenens, B., Luyckx, K., and Lens, W. 2009. Motivational profiles from a self-determination theory perspective: The quality of motivation matters. *Journal of Educational Psychology* 101:671-688.
- Vroom, V. H. 1964. *Work and motivation*. New York: Wiley

Ward, J.H. 1963. Hierarchical Grouping to optimize an objective function. *Journal of American Statistical Association* 58,301:236-244.