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Participation in Adult Education: Attitudes and Barriers

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In this paper, we control the intention theory of Fishbein and Ajzen (1980) for the participation in an adult education course. Based on the Flemish Eurostat Adult Education Survey, we reveal that participants in adult education have a more positive attitude towards learning and that within the group of non-participants, those who formulate an intention to participate score higher on attitude scales than non-participants without intention. The main reasons for non-participation are related to time squeeze and although the model of Fishbein and Ajzen (1980) stresses the importance of attitude, barriers are more than the mask of a poor attitude. Education policy and practice should therefore help adults in overcoming these obstacles.

Keywords: participation, adult education, intentions, attitudes, barriers

Introduction

Lifelong learning is considered important in order to guarantee economic and social prosperity and well-being within a country (Hoskins, Cartwright, & Schoofs, 2010). European policy documents, such as the Lisbon Strategy, signed in 2000, strived towards a participation rate of 12.5% of all adults between 25 and 64 years old in at least one learning activity (European Commission, 2000). Recent European policy documents speak about participation targets of 15% by 2020 (European Commission, 2009). Despite of the political agenda, lifelong learning does not yet become a reality in a wide range of European countries. Nordic countries have high participation rates, but Southern and Eastern European countries score rather low. Western European countries can be found in between. Overall, many European adults do not succeed in learning at a later life stage after having left the initial school system.

In this paper, we search for explanations of this failure, starting from the point of view of the individual. Although it is the intention from policy makers to let adults participate in lifelong learning in order to catch up with social and economic objectives, and intentions to learn might be lacking at the level of the population. On the other hand, it is possible that individuals form intentions, but that they fail to implement these intentions into effective participation. Gaining insight into these failures can be concerned as an important contribution to both the research field of lifelong learning and further implementation of policy strategies to increase the overall participation rate.

Before showing empirical analyses and making reflections on these results, there is a need of clarifying the concept of lifelong learning to state who the actual lifelong learners are and how intentions to participate are shaped. We start with a theoretical overview in which definitions are explained and continued with analyses based on the Flemish Adult Education Survey.

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Theoretical Framework

Lifelong learning is a broad and elastic term which allows for different interpretations (Johnston, 2000; as cited in Rogers, 2006). On the one hand, lifelong learning refers to all learning activities undertaken from cradle to grave, including kindergarten and compulsory education (Hasan, 2001). On the other hand, lifelong learning is often used in the context of adult education. Setting a participation rate goal of 12.5% refers to formal as well as non-formal adult education. In the literature, formal education refers to hierarchically structured education and training systems with the authority of granting degrees and diplomas, while non-formal education focuses on organized education outside these systems of schools and formal training institutes (Eurostat, 2005; Colley, Hodkinson, & Malcolm, 2003). In the following parts of this paper, we use the term adult education, including both formal and non-formal education.

Focusing on the characteristics of adult learners, many researchers have demonstrated that the population in adult education does not reflect the class structure of the entire population (Jarvis, 2004). This conclusion was already made during the late seventies and persists until now. Recent research by Desjardins, Rubenson, and Milana (2006) based on the International Adult Literacy Survey 1994-1998, the Adult Literacy and Lifeskills Survey 2003 and the EU (European Union) Barometer 2003 showed that adults in various range, mainly OECD (Organization for Economic co-operation and Development) countries, have unequal chances to participate in adult learning. Variables taken into account were age, sex and social class by means of the educational level of the parents, the educational level of the adults observed, level of literacy skills, occupational status, employment status and minority status. Within the report, the authors created six contrast groups with different chances to participate:

Group 1: employed mid- to late- career-aged (45-65) adults who are less-educated, less-skilled, and in low-skill blue-collar jobs;

Group 2: employed mid- to late- career-aged (45-65) adults who are highly-educated, highly-skilled, and in high-skill white-collar jobs;

Group 3: employed early- to mid- career-aged adults (26-45);

Group 4: unemployed or out-of-the-labor-market mid- to late- career-aged (45-65) adults who are less-educated and less-skilled;

Group 5: unemployed or out-of-the-labor-market mid- to late- career-aged (45-65) adults who are highly-educated and highly-skilled;

Group 6: unemployed or out-of-the-labor-market early- to mid- career-aged adults (26-45).

Adults in groups 1 and 4 have lower chances to participate in comparison to those in groups 2 and 5, due to their lower level of educational attainment and skills. Younger adults (groups 3 and 6) tend to participate more, regardless of the highest level of education. Having a job or not makes a difference over here.

Findings in literature state the reduced participation of older groups in adult learning (Bélanger, 1997; Doets, Hake, & Westerhuis, 2001; Edwards, Sieminski, & Zeldin, 1996). Their perspectives on the labor market are shorter and the balance between costs and benefits will thus be reduced compared to younger employees. Competences of older adults have possibly become obsolete over time, resulting in a lack of the required entry conditions (Jacobs & van der Kamp, 1998). Being active in the labor market generates more job opportunities as the workplace itself is an important supplier of learning possibilities. Employers can also make financial contributions to the learning participation of their employees outside their own learning place.

Rubenson (2009) stated that the "long arm of the job" remained a crucial determinant of adult learning participation. Adults with a higher level of education are mainly employed in jobs with higher learning possibilities and are more considered to be able to manage the requirements of the rapid changing world (OECD, 2003). They feel also more confident in learning situations due to their positive experiences in the formal education system.

Stating that some social groups participate more than others do is one thing, trying to search for underlying mechanisms explaining how these inequalities are shaped is rather complex. Several researchers, some in the field of adult education, have developed comprehensive and predictive participation models, mainly focusing on individual aspects leading to participational or non-participational behavior (Boeren, Nicaise, & Baert, 2010). These models are mainly made based on social psychology explaining an interaction between the self and the personal environment. In the following part of the text, we will refer to several of these models. Psychological theories, concerning the change of behavior, focus on the construct of intentions (Abraham & Sheeran, 2000; Weinstein, 2003; Sniehotta, Scholz, Schwarzer, Fuhrmann, Kiwus, & Voller, 2004). In social-cognitive psychology, intentions are seen as close and powerful predictors of behavior and are mainly influenced by motivational forces, such as attitudes and beliefs. These thoughts were comprised in the *Theory of Reasoned Action* by Fishbein and Ajzen (1980). Attitudes and beliefs about the behavior, in our case of participation in adult education, will lead to the development of an intention or non-intention to participate. Those who formulate an intention and do participate are inclined actors, those who do not develop an intention but participated are disinclined actors mainly participating based on an external pressure (Sheeran & Sniehotta, 2007). Those who do not develop an intention and do not participate are the disinclined abstainers, those who do develop an intention but do not participate are called the inclined abstainers. A schematic overview of the (non-) realization of behavior is indicated in Table 1.

Table 1

Theory of Reasoned Action

Stage 1	Stage 2	Stage 3
Attitudes/ Beliefs	Intention	Behavior
		Non-Behavior
	Non-Intention	Behavior
		Non-Behavior

In the last three decades, behavioral researches have focused on "gaps" between the second and the third stage of this model, especially on intentions which are not converted into behavior, named volitional problems (Eccles et al., 2006; Allan, 2008; Hall, Eong, Epp, & Elias, 2007). Heckhausen (1991) found three major problems explaining these gaps: (1) not getting started because other daily life activities were absorbing too much time; (2) not overcoming obstacles such as lack of resources; and (3) not being able to re-activate the intention in an ongoing activity resulting in drop-out and non-persisting behavior.

Two participation models in the field of adult education focus explicitly on barriers as explained by Heckhausen. The chain of response model of cross (1981) is well-known for these barriers. Once a positive attitude towards learning is achieved and the importance of participation in an adult education course is recognized, barriers can hinder the transformation into an actual participation. Cross distinguished three types of barriers: (1) situational barriers related to the combination of the different life spheres; (2) institutional

barriers caused by characteristics of the learning institutions that do not fit with the learning needs of the adult learner; and (3) dispositional barriers related to psychological uncertainties and decreased self-confidence. The psycho-social interaction model of Darkenwald and Merriam (1982) started with the pre-adulthood situation and stated that children born in families with a strong socio-economic background obtained a better social position in later life. A higher educational attainment and better jobs lead to fewer barriers and thus to more chances to participate in adult learning. Rubenson and Desjardins (2009) warned readers that barriers were often subjective thresholds which could be experienced in a different way by different persons.

Attitudes, intentions, barriers and (non-) participation seem to be highly related. In this paper, we will go in search for non-participants with unfulfilled intentions and will give an overview of their experienced barriers. In a second stage, we will perform analysis to unravel if attitudes are linked with these sets of barriers. We perform these analyses based on the Flemish adult education survey.

Research Method

The Eurostat Adult Education Survey (AES/2009/02), measuring adult learning participation in Europe, was organized in Flanders during 2007 (Eurostat, 2005). The core questions relate to participation in formal, non-formal as well as informal learning. Furthermore, background characteristics are collected: age, gender, family situation, employment status, educational attainment and language and ICT (Information and Communications Technology) skills. In our paper, we will mainly focus on age, employment status and educational attainment as these characteristics come out as the main important determinants of adult learning (see six groups of Desjardins, Rubenson and Milana above).

The questionnaire contained 11 subsections: information of family size, socio-economic background, participation in education and training, barriers to participation, informal learning, access to information on learning possibilities, use and level of ICT skills, language skills, participation in cultural activities, participation in social activities and attitudes towards learning. Variables of use in our research paper are the participation in formal and non-formal adult education, the presence of a participation intention, barriers indicated by non-participants with unfulfilled intentions and the attitudes towards learning.

We have made use of the Flemish Eurostat Adult Education Survey. Flanders is the Northern part of Belgium and counts six million people. The sample was stratified on age criteria (25-34, 35-49 and 50-64) and gender and contains adults between 25 and 64 years old. The survey combined a postal and online survey. In total, 8,677 Flemish adults were sampled, and 3,104 participated in the survey which was a response rate of nearly 36%. As the reference period related to participation in adult education in the Adult Education Survey is 12 months (instead of four weeks), we cannot compare with the Lisbon target of 12.5%. In order to work with a representative sample, the dataset is weighting by gender, age, employment status, educational attainment, nationality and family size.

Results

We present the analyses in two subsections. The first one contains descriptive data on participants versus non-participants which are divided into two groups: those who have had and those who have not had an intention to participate. The second one starts with an overview of barriers experienced by adults with unfulfilled learning intentions, afterwards, we will search for relations between attitudes, participation, intention and these barriers.

Participants Versus Non-participants

Participants in adult education are those who have participated in at least one formal or non-formal course during the 12 months preceding the survey. Table 2 gives an overview of the total participation rate in Flanders, divided into formal and non-formal education, as well as the overlap.

Table 2

Percentages of Participation and Intention in Flemish Adult Education

Participation	*N*	Percentage	Intentions	*N*	Percentage
Formal	413	13.3	Intention	421	13.6
Non-Formal	1100	35.4	Non-Intention	1,342	43.2
Overlap	172	5.5			
Total	1341	43.2	Total	1,763	56.8

Out of 3,104 respondents, 1,341 of them indicated to participate in adult education in the last 12 months (43.2%). A minority (5.5%) participated in both formal and non-formal adult education. Results of the European Adult Education Survey show a European average rate of 42.5 % (Eurostat, 2009). Compared to the Flemish Labor Force Surveys 2003 and 2005, the participation rate slightly increased from 39.6% in 2003 over 41.9% in 2005 into 43.2% in 2007 (Vermeersch, Vandenbroucke, & Boeren 2009). Despite this minor progress, we do not yet succeed in catching up with the best performing regions, such as the Scandinavian countries.

Of all non-participants, 421 adults had the intention to follow a course during the last 12 months but did not succeed to get started. Reasons of these failed behaviors are analyzed in the following subsection. These results in Table 2 also indicate that 43.2% of the entire samples do not have any intention to participate in adult education. Being concerned about the social inequalities attached to the topic of adult education participation, we have searched for differences in participation and intentions within the entire sample population. We have made this comparison based on the variables age, employment status and highest educational attainment (see Table 3). In comparison to the age groups of Desjardins, Rubenson and Milana, we have set our cut-off point at age of 50 as the age variable in the Flemish Adult Education Survey Database is recoded as 25-34, 35-50 and 51-64.

Table 3

Comparison of Participant and Intention Group With Sample Group

	Sample group *N* = 3,104	Participant group *N* = 1,341	Intention group *N* = 421
Age			
25-49	61.9	74.0	68.0
50-64	38.1	26.0	32.0
Employment status			
Job	72.8	84.4	73.1
No job	27.2	15.6	26.9
Education			
Isced 0-4	70.3	54.1	76.2
Isced 5-6	29.7	45.9	23.8

The entire sample contains 61.9% of adults aged 49 and younger, 72.8% is employed and 29.7% has a degree of higher education. These percentages change when we look at these same variables within the smaller participation group. In comparison with the sample population, youngsters, those having a job and those with a higher educational degree participate more in adult education. If we combine these three variables into the six contrast groups of Desjardins et al., we obtain results as showed in Figure 1.

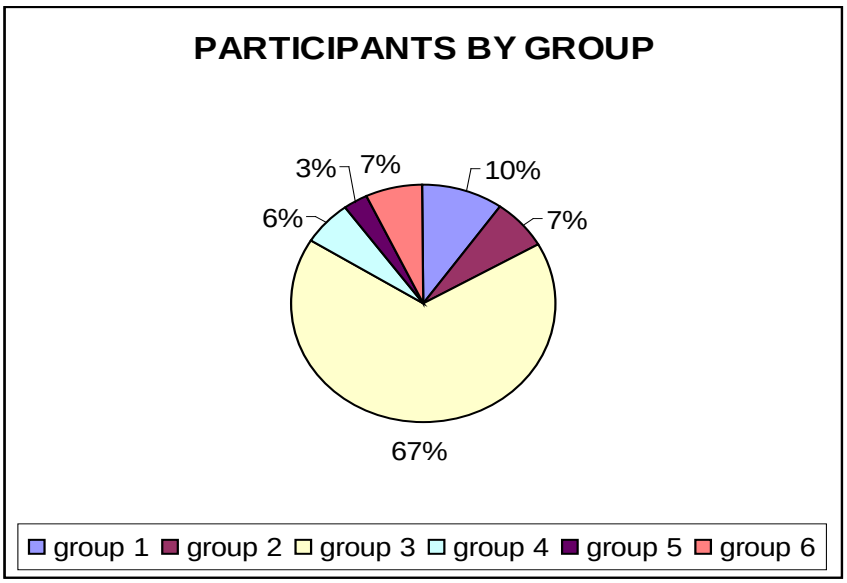

Figure 1. Participants by six contrast groups.

Group 3 contains all adults younger than 50 who have been employed at the date of the survey. Two out of three participating adults belongs to this group. It is a bit striking that the second largest group consists of older low skilled adults, but all five remaining groups outside group 3 are rather small. In fact, this result counts as a confirmation of the literature, stating that young people with longer perspectives in the labor market and those who are already employed, have more chances to participate in adult education (see Figure 1).

The characteristics of the intention group differs less with the entire sample. Adults below 50 experience more unfulfilled intentions to participate than those of 50 and above. Employed adults have more unfulfilled intentions than those who do not have a job, but the difference with the sample group is very small. Higher educated adults have less unfulfilled intentions which can be explained by their already high participation.

If we combine these three variables, we have to conclude that working adults below 50 form the largest group within those with an unfulfilled intention. Among the older adults, those without a higher degree have more unfulfilled intentions.

Based on these descriptive results, we can conclude that effective and non-effective but wannabe participants are old employed adults below 50 years old. We can make different hypotheses to explain this situation. The current European and Flemish policy focuses on education and training in terms of employability and innovation, and tries to stimulate adults by supplying training vouchers to employed adults and offering possibilities for paid educational leave. If we look at the main motives of participating in the current course, we notice indeed that job-related motives play an important role. Within formal adult education, the division between job-related and personal reasons is 50-50, within non-formal adult education almost seven out of ten adults participate for mainly job-related reasons. This can be explained by the types of non-formal adult education as questioned by the Adult Education Survey, such as on-the-job training.

Another hypothesis is the indirect influence of the educational attainment of the adults within the age group of 25-49. In this group, 35% has a degree of higher education versus only 21% of the adults in the oldest age group. This can be explained by the democratization of education, which has been less developed when 50-plus adults were adolescents.

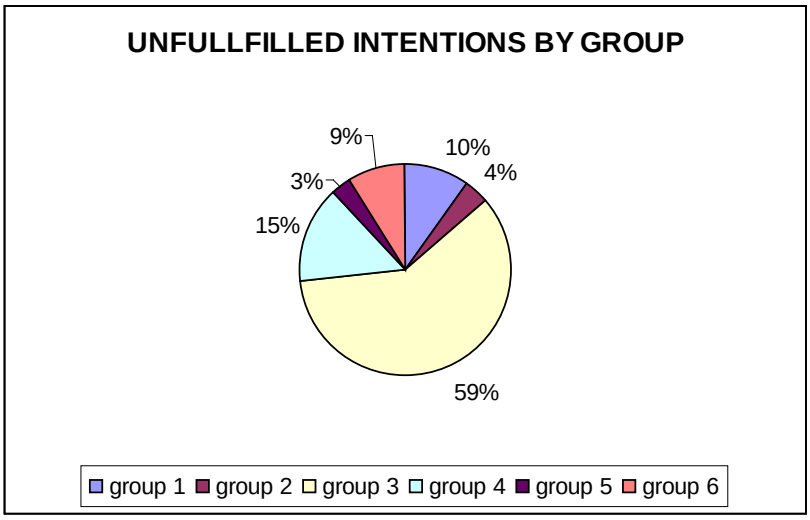

Figure 2. Experience of unfulfilled intentions by six contrast groups.

Barriers Experienced by Wannabe Participants

In this subsection, we focus on the 421 non-participants which have had an intention to participate during the last 12 months. In order to get some insight in the reasons of their failed behavior, we try to fill in the intention-behavior gap by means of eight barriers. Using the division as made by Cross (1981), we have four situational barriers (lack of employer's support, financial problems, conflict with work schedule and time pressure problem), two institutional barriers (lacking prerequisites and distance) and two dispositional barriers (lack of confidence and age or health problems). In Table 4, we give an overview of the amount of adults having experienced these problems and divide these percentages by age, employment status and educational attainment. Significant differences are indicated by means of the Chi-Square.

Within the situational barriers (2, 3, 4, 5) as well as in the entire set of barriers, time problems are dominant. One out of four adults with unfulfilled participation intentions experience difficulties in order to combine different life spheres and around 30% of all working adults notices conflicts between following a course and their current working schedule. These time problems are mainly situated within the group of adults aged 25-49. Flemish time budget research shows that among all adults, those between 26 and 40 years old spend most time in the labor market and need most time for childcare and parenting (Glorieux, Minen, & Van Tienoven, 2008). After the age of 55, labor market activeness is strongly reduced due to well developed systems of early retirement. Working adults experience more time problems than non-working adults. On a week basis, full-time working adults record 12 hours less leisure time and have a reduced sleeping and relaxing time of one hour a day. The overall time pressure is more present with higher educated adults, but as stated above, within these groups, we find more youngsters and working adults. Financial problems are reported by a bit more than one out of ten adults. Although differences between the groups are not significant, it is remarkable that those in the youngest age group and those with a job experience most financial problems. The workplace itself is an important supplier of training possibilities. An employer has power to pay for training outside the company and Flemish working adults can make use of training vouchers. We can hypothesize that younger and working adults are possibly interested in more expensive courses which are not supported by the employer or which remain expensive in spite of the training vouchers, but we do not have the data material to

make concrete statements on this. We can make some similar comments on the lack of support as experienced by working adults. Those with a higher educational attainment report are more lack than those with lower degrees. At a general level, it is accepted that high educated adults in high skilled jobs get more training possibilities within the work place. We have to be conscious that only 421 adults with unfulfilled intentions are available in our dataset. Among the 10% of the adults in barrier, only three is calculated on the working adults, resulting in 34 observations, which is rather low.

Rather small percentages of adults indicate the experience of institutional barriers. Prerequisites become more problematic for adults without a job, possibly due to the (temporary) stand still of their skill development. Furthermore, it is not surprising that adults with lower educational attainment experience this problem a bit more as a previous diploma remains an important valid entrance ticket in formal adult education. However, the reporting of this barrier remains small. The same counts for the reachability of educational institutions. Differences between socio-economic characteristics are not significant. The new decree of formal adult education has divided Flanders into 13 regions with the aim of developing an offer of adult education within everyone's neighborhood (Vlaamse Regering, 2007). Also non-formal organizations such as Vorming Plus (the former Flemish folk high schools) have a decentralized structure with many local divisions.

Table 4

Experience of Barriers by Personal Characteristics

	1	2	3	4	5	6	7	8
Total N = 421	5.4	11.1	10.8	30.1	25.7	9.0	3.1	11.9
Age								
25-49	5.2	12.9	10.9	33.2	29.7	9.8	4.2	6.3
50-64	5.9	7.4	10.3	19.4	17.0	7.4	1.5	23.7
Significance	n.s.	n.s.	n.s.	***	**	n.s.	n.s.	***
Employment status								
Job	3.9	11.4	10.8	30.1	28.2	9.4	3.6	5.2
No job	9.7	9.7	-	-	19.3	7.1	1.8	30.1
Significance	*	n.s.	-	-	*	n.s.	n.s.	***
Education								
Isced 0-4	6.3	11.8	9.5	29.3	23.1	9.7	3.7	14.3
Isced 5-6	2.0	9.0	14.5	32.5	34.0	6.0	2.0	4.0
Significance	n.s.	n.s.	*	n.s.	*	n.s.	n.s.	**

Notes. *** $P \leq 0.001$; ** $P \leq 0.010$; * $P \leq 0.050$; n.s. = not significant; Barriers: 1. I did not have the prerequisites; 2. Training was too expensive/I could not afford it; 3. I experienced lack of employer's support (working adults); 4. Training conflicted with my work schedule (working adults); 5. I did not have the time because of family responsibilities; 6. There was no training offered at the reachable distance; 7. I was not confident with the idea of going back to something that is like school; 8. My health or age is a problem.

The dispositional barrier measuring the confidence of going back to school is the lowest among all eight barriers. The concept of confidence is quite related to the concept of attitude (Keller, 1987) and we can thus hypothesize that adults with a high disgust related to schools and education will not develop an intention to participate in learning activities (Fishbein & Ajzen, 1980). In that view, it is not surprising that this barrier is less indicated than the other ones. On the other hand, we notice that a larger group of adults, 50 years and older and adults without a job, have indicated that their health situation or age was a main problem in not getting started in an adult education course. The differences with the younger and working adults are highly significant. Also, differences between adults with a different educational background exist. It seems self-evident that this barrier is more indicated in the highest age group (as age is in the variable itself) and we

know that more of the older adults can be found in the group of non-workers and lower educated adults. On the other hand, we have to question if we can relate this barrier to problems of self-confidence. Adults between 50 and 64 reach a respectable age, but do not yet belong to the group of the oldest population in which health problems become common.

In the next part of the text, we will focus on the first stage of the Theory of Planned Behavior: Attitude.

Exploring Relations Between Attitude and Barriers

It is generally accepted that a positive attitude towards a behavior results in intentions and actual behavior. Little is known about the relationship between the barriers in the intention-behavior gap and the attitudes towards that particular behavior. As the Theory of Planned Behavior can be seen as a continuous model in which previous stages are influencing the following stages, we can hypothesize relations between barriers and attitudes as well.

Keers and Wilke (1991) described an attitude as the way in which a person is thinking about a certain object or situation, what his feelings are related to this certain object or situation and how he will behave towards this. Blunt and YANG (1995) have conducted research on attitudes related to adult education and have widely contributed to the understanding of the concept. Experience of enjoyment of learning, recognizing the intrinsic value of learning for their own life and perceiving the importance of adult education for wider benefits are three main key indicators for obtaining a positive attitude.

Within the Adult Education Survey, eight attitude items were measured on a five-point Likert scale. In Table 5, we will show general descriptive results of these eight items, and in Table 6, we will analyze if differences are significant between those who have and those who have not experienced a certain barrier. To present results in a clear structure, we show the percentage of respondents who have agreed or completely agreed with this statement. This percentage is, thus, the sum of answering scores four and five of the Likert item scale. Furthermore, we show if these results differ significantly between groups, based on a Mann-Whitney U-test. This non-parametric test is used to disentangle the differences between groups related to ordinal measurements (Sheskin, 2004).

Table 5 contains the total descriptive results of the entire sample (N = 3,104) divided by participants (1) and non-participants (0). At an average level, the attitude towards learning of the Flemish sample is positive. More than 90% agrees with the fact that improving skills and knowledge is important to be successful at work and more than 80% agrees with the outcome of growing self-confidence and that learning is fun. More than three out of four adults find it evident that an employer should be responsible for the training of their employees and we can relate this statement to the preparedness to pay something for adult learning, on which only four out of ten adults agree. The belief in classroom learning is rather low. Only half of the entire sample judges classroom education as a well-adapted environment to improve skills.

Comparing participants with non-participants results in a confirmation of the Theory of Planned Behaviour of Fishbein and Ajzen's (1980). On seven out of eight items, participants have higher scores than non-participants. We can thus state that participants have a more positive attitude towards learning. Among participants, there is also a higher belief in traditional classroom education. Also, a comparison between those with and without an intention to participate in adult education within the group of non-participants results in a similar conclusion. After controlling for the confirmation of the already known knowledge, we will now go in search for new information on the intention-behavior gap.

Table 5

Attitudes Towards Learning Divided by Participation and Intention

		P	*I*
1. People who continue to learn as adults are more likely to avoid unemployment.	0	65.0	62.7
	1	75.3	70.1
Total		69.9	
		***	*
2. If you want to be successful at work you need to keep improving your knowledge and skills.	0	86.4	85.1
	1	94.7	89.1
Total		90.3	
		***	**
3. Employers should be responsible for the training of their employees.	0	75.2	73.8
	1	79.4	77.1
Total		77.2	
		n.s.	n.s.
4. The skills you need to do a job can't be learned in the classroom.	0	57.2	58.6
	1	43.7	51.1
Total		50.8	
		***	*
5. Education and training can help you manage your daily life better.	0	61.4	58.1
	1	66.1	68.5
Total		63.6	
		n.s.	**
6. Learning new things is fun.	0	83.3	79.7
	1	92.6	91.3
Total		87.7	
		***	***
7. Learning gives you more self-confidence.	0	74.7	70.5
	1	87.5	85.3
Total		80.8	
		***	***
8. Individuals should be prepared to pay something for their adult learning.	0	40.3	40.6
	1	45.0	40.0
Total		42.5	
		***	n.s.

Notes. *** $P \leq 0.001$; ** $P \leq 0.010$; * $P \leq 0.050$; n.s. = not significan; *P* = participants (1) versus non-participants (0); *I* = non-participants with intention (1) versus without intention (0).

Table 6 contains information on adults having an unfulfilled intention to participate in adult education (*N* = 421). As indicated in Table 4, some barriers are only experienced by small parts of this sample group. Therefore, we have to be cautious about the interpretations of the results. Smaller sample size groups are less sensitive for showing significant results although differences are clearly present. We will analyze the attitudes of these adults barrier by barrier.

Adults lacking prerequisites (barrier 1) are more convinced of the fact that learning can help in avoiding unemployment in comparison of those who have not experienced this barrier. They are also more prepared to pay for their own training instead of focusing on the responsibility of the employer and have a higher belief in classroom learning. Although differences between groups (not) experiencing financial barriers (barrier 2) are not significant, those who can not afford their intended participation, believe less in avoiding unemployment as a result of learning, but have also very positive scores on the need of improving skills and knowledge in order to be successful at work. They are also convinced of the fact that learning can give you more self-confidence. Furthermore, it is not so surprising that adults encountering financial problems focus more on the responsibility of the employers in offering or supporting training to their employees. Comparable to the structure of attitude

as found by Blunt and YANG (1995), we can hypothesize that this group of adults enjoy learning and subscribe the importance of participation in adult education for wider social and economic benefits, but that the intrinsic value for their own life is too small to invest. This hypothesis, however, tackled by the last statement are these same adults who have a higher score on preparedness to pay something for their learning than those without financial problems. Adults, experiencing a lack of support of their employer (barrier 3), indicate a higher expectation towards employers' support, which seems evident as those two variables have a very close content. Furthermore, they believe more in avoiding unemployment, but less in being successful at work as a result of learning. Other attitude items differ less in scores. Concerning the conflict with the working schedule (barrier 4), it seems remarkable that those experiencing this imbalance put less pressure on the responsibility of the employer. Furthermore, they are less convinced that adult learning can help you avoiding unemployment. Based on time budget research, we can conclude that among working adults, hours spent on their job is a very large part of their entire time budget of 168 hours a week (7 × 24 hours) (Glorieux et al., 2008). Based on this objective time measurement instrument, we can state that time pressure among employed adults is a real barrier to participation which is more than just a lack of attitude towards the behavior. The same conclusion can be drawn for the time pressure to combine learning with the family life (barrier 5). Again, this group of adults, experiencing time problems, have lower scores on the responsibility of the employer. As time pressure is a common problem experienced in the contemporary society, education can be seen as a solver of this problem in terms of obtaining more efficiency in one's daily life. It is clear that this is not yet recognized by adults experiencing time difficulties as they have a lower score on the statement about managing your daily life better.

Table 6

Attitudes Towards Learning Divided by Barrier

		Barrier 1	Barrier 2	Barrier 3	Barrier 4	Barrier 5	Barrier 6	Barrier 7	Barrier 8
1. People who continue to learn as adults are more likely to avoid unemployment.	0	69.9	71.5	68.8	71.5	70.9	70.7	71.5	69.6
	1	81.4 *	63.3 n.s.	73.6 n.s.	64.8 n.s.	69.5 n.s.	69.5 n.s.	40.8 n.s.	77.5 n.s.
2. If you want to be successful at work you need to keep improving your knowledge and skills.	0	89.0	88.8	88.5	86.6	89.1	89.4	89.1	89.4
	1	94.0 n.s.	92.6 n.s.	80.0 n.s.	89.7 n.s.	89.6 n.s.	87.7 n.s.	93.4 n.s.	87.8 n.s.
3. Employers should be responsible for the training of their employees.	0	77.5	76.3	73.7	78.4	80.1	77.3	76.8	75.6
	1	68.8 n.s.	82.6 n.s.	90.3 **	69.0 **	68.3 **	74.4 n.s.	83.1 n.s.	87.6 *
4. The skills you need to do a job can't be learned in the classroom.	0	52.2	52.3	50.9	48.8	52.9	51.4	52.1	51.9
	1	43.9 n.s.	47.3 n.s.	49.5 n.s.	55.1 n.s.	48.6 n.s.	54.8 n.s.	40.1 n.s.	50.7 n.s.
5. Education and training can help you manage your daily life better.	0	67.9	67.3	64.4	64.2	71.0	69.4	67.8	68.5
	1	70.0 n.s.	73.8 n.s.	61.9 n.s.	63.9 n.s.	59.6 **	54.5 n.s.	74.8 n.s.	64.5 n.s.
6. Learning new things is fun.	0	91.0	90.4	90.8	90.4	89.7	90.3	90.6	91.6
	1	89.5 n.s.	95.0 n.s.	90.9 n.s.	91.9 n.s.	94.6 n.s.	97.3 n.s.	100.0 n.s.	86.1 n.s.
7. Learning gives you more self-confidence.	0	84.8	83.7	84.1	82.2	83.5	84.8	84.1	85.6
	1	79.0 n.s.	90.2 n.s.	84.9 n.s.	88.5 n.s.	87.4 n.s.	81.4 n.s.	95.2 n.s.	76.4 n.s.
8. Individuals should be prepared to pay something for their adult learning.	0	38.0	38.0	38.1	38.1	40.5	38.4	38.0	39.1
	1	50.6 n.s.	43.5 n.s.	40.2 n.s.	38.8 n.s.	33.3 n.s.	41.2 n.s.	58.2 n.s.	34.9 n.s.

Notes. *** $P \leq 0.001$; ** $P \leq 0.010$; * $P \leq 0.050$; n. s. = not significant.

No educational offer at a reachable distance (barrier 6) has been indicated by 9% of the intention sample group. They are also less convinced that education can help you manage your daily life better, but they enjoy learning more. Other statements only show small differences.

The two remaining barriers are the so-called dispositional barriers. Not enrolling for a course, as one is not confident with the idea of going back to school (barrier 7), has been indicated by 3% of the sample group. Only talking about 13 individuals, it is hard to make generalizations based upon these results. Compared to the other barriers, these adults have less belief in avoiding unemployment as a result of learning but are more prepared to pay something for training. Although they are not confident with the idea of going back to school, their belief in education as something which will improve your own self-confidence and help you to manage your daily life better is indicated. The last barrier, health and age problems (barrier 8), is mainly experienced by older and non-working adults. Those who have come across this barrier stress more the responsibility of the employer and are more convinced that adult learning can protect you from unemployment. On the other hand, they experience learning as less funny and are not convinced of the impact of learning on their self-confidence.

At an overall level, it is very difficult to notice some clear lines in these results. Some attitude items have higher scores for adults experiencing barrier *x* and lower scores for adults experiencing barrier *y*. And adults experiencing a particular barrier have some higher scores on attitude *x* and lower ones on attitude *y*. When we compare barriers of the same type (situational—institutional—dispositional), it remains difficult to make clear conclusions. Compared to the results of the entire sample divided by participants and non-participants and the latter group divided by those (not) having an unfulfilled intention to participate in adult education (see Table 5), attitude scores are more close to each other among those who intended to participate (see Table 6). These observations lead us to the conclusion that the intention-behavior gap related to adult education participation in Flanders is probably more than a psychological construct and asks for broader social reflections than only on attitude.

Discussion

In this paper, we have searched for answers to fill in the intention-behavior gap based on a set of eight barriers. In this last part of the text, we summarize the main results and make some reflections for discussion and further research.

In European terms, the Flemish participation rate in adult education is average. Of all non-participants, three out of four respondents do not have an intention to participate. Although this group is not the main focus of our paper, this result is not so encouraging. It is the aim of the European and Flemish policy to let adults learn, and recent research by the German Bertelsmann Stiftung (2009) has shown that learning for several purposes (to be, to know, to do and to live together) has significant correlations with social, economic and monetary benefits, not only at the level of the individual, but also at the level of the wider society. Examples of such outcomes are an increased employment rate, more life satisfaction, less smoking adults and an increased life expectancy at birth. It is regrettable that a large percentage of the adults themselves (43%) do not yet recognize these advantages. As a first point of discussion, we feel there is a need of further exploring the strategies of implementing a stronger culture of learning among several social strata, such as low skilled and low educated adults. The Psycho Social Interaction Model of Darkenwald and Merriam (1982) stated that participation was less realized among those with a poor socio-economic background and a poor level of education achieved in later life. In this view, it is important to stress the role of compulsory education, including schools and kindergartens as institutes that can compensate for social inequalities at home in stead of

reproducing the middle class structures (Bourdieu, 1984). In this case, it is clear that adult education as used within this paper has to be a part of a wider lifelong learning discourse which takes place from cradle to grave.

Furthermore, we would like to focus in our discussion on learning possibilities for 50 plus adults. This age group does not only participate less, their intentions to participate are also lower. Being conscious about the positive outcomes of learning, it might be meaningful to urge policy makers and employers to invest in these older adults as well. The Adult Education Survey does not provide information on adults within the retirement age—because they do not belong to the working age population anymore—but previous research has shown that these adults are less present in adult education in comparison to other age groups. As human beings are getting older nowadays, there is a need of integrating this age group as well.

Among all barriers experienced by adults with unfulfilled intentions, the time barrier has come without doubt out as the main important obstacle to participate in adult education. Theorist on time use research state that contemporary time pressure is a result of disappearing traditions, disappearing strong normative structures, an increased emancipation and an increased overall level of welfare (Moens, 2006). Changing working patterns and more females active in the labor market are examples of variables causing time pressure. Furthermore, adults become more and more leisure omnivores searching for a wide range of exciting experiences. Integrating these disappearing structures with more diverse life goals explains the overall presence of time pressure. Nowadays, policy makers and companies have already implemented tools in order to combine the different life spheres, such as paid educational leaves, career interruption, offering possibilities of part-time work and early retirement. Nevertheless, the pressure for full-time work remains rather high, certainly if one is not prepared to sacrifice some of the obtained life comfort. Linking attitudes and barriers yield less added value to our research outcomes. Therefore, there is a need of broader discussions on general time structures and how adult education can fit in. In our discussion, we want to stress the need of clarifying the priorities of adult education for every single adult and to work on a detection of their learning needs, not only in terms of learning subjects, but also in terms of learning organization. Implementing strategies, such as, offering distance learning and more flexibility to organize one's own learning route, can help. In this regard, we want to stress that participation is not the solely responsibility of the adult him/herself. Educational structures, policy incentives and the role of the employer should be taken into account. Participation is the result of a bounded agency and can only be achieved if diverse levels are able to match with each other.

As a last point, we want to raise the concerns about the experience of age and health problems among older and non-working adults. The non-working group contains adults on an early retirement, but also disabled or those incapable to work due to health or mental problems. We want to increase the discussion on the shape of learning possibilities for these groups as adult education can be seen as a valuable instrument to integrate these adults more in the society. Although they might not be able to contribute to the labor market, it remains important that participating in adult education has to count for more than just serving the economy.

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