

Report D2: State-of-the-art on Early School Leaving and Dropouts

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This report is part of the EUFEDER 2014-2020 project TICKLE

Adaptive Persuasive ICT Tools to Tackle School Burnout Among Youngsters in Brussels

With the support of the European Fund for Regional Development (EFRO)



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Abstract

In order to address the problem of school dropouts we first need to understand the factors that influence youngsters decision to leave school without a degree. Many studies have focused on identifying the causes of early school leaving, as well as its consequences. Therefore, this report provides an overview of the existing academic literature related to early school leaving, covering two major topics: (1) the prevalence of ESL in Europe, Belgium and Brussels as part of the contextualization of the TICKLE project, and (2) the predictive value of factors that influence youngsters' decision of ESL. This literature study shows that Belgium and Brussels are performing rather poorly in terms of the EU 2020 plans to reduce the number of youngster between 18 and 24 who leave secondary education without a degree. This problematic situation is also reflected by the numbers related to the social and economic consequences known to be directly related to ESL, such as unemployment and poverty. The findings with regard to the predictive value of factors that influence youngsters' decision to drop out indicate that ESL is a highly complex issue. Empirical studies have shown that ESL is the result of a cumulative process that can commence several years before youngsters enter secondary education. These studies also show that a very large variety of factors can play a role in the decision of ESL. These influencing factors can be categorized into three major groups related to the youngsters' macro environment, micro environment or individual characteristics. None of the factors identified by empirical research are conclusive in terms of predicting ESL. As a consequence, screening and prevention programs should rely on wide body of information related to multiple influencing factors to compile a more complete picture of the youngsters if they want to be successful at early detection and remediation of school burnout and ESL.

Keywords: *Early school leaving, dropouts, education, motivation, prediction*

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Introduction

In this report, we present a state-of-the-art on research regarding early school leaving (ESL) and school dropouts. The report is part of the research EUFEDER 2014-2020 project called *Adaptive Persuasive ICT Tools to Tackle School Burnout Among Youngsters In Brussels (TICKLE)*. The research project will result in the development of innovative ICT tools that can aid educators and social workers to (re)activate and motivate youngsters who are experiencing school burnout. As such, the project will support a flexible and cost-effective approach to the prevention of ESL.

The research team aims to optimally use modern technologies and the popularity of digital media within the project. After all, prior research has clearly indicated that these technologies and media forms provide many opportunities for children, youngsters and adults to participate in culture and to engage in spontaneous learning processes (see Vlieghe, 2014). People who participate frequently in these learning processes often experience a positive effect in terms of self-confidence and the intrinsic motivation to engage in life-long learning. As the literature study featured in this report will point out, this boost in confidence and intrinsic motivation can have a positive influence on the reduction of school burnout and ESL.

At the onset of the TICKLE project, the researchers undertook a number of exploratory studies to get a proper insight into the context of their work. These studies included topics such as media use among young adults (see Vlieghe & De Troyer, 2016), available technologies and design strategies and influencing factors of ESL. The current report represents the outcome of the last named study, which consists of a broad literature review related to the prevalence of school dropouts in Europe, Belgium and Brussels, as well as various factors that can influence the decision of ESL. When we address the latter, we focus primarily on the findings related to the value of these influencing factors as a predictor for the decision of ESL.

While studies of ESL and drop-outs often focus on the same issues, definitions in the academic literature tend to vary given the different socio-cultural and economic contexts in which the studies are situated. Despite many similarities, most countries have a unique approach to how education is valued, defined and organized. This approach is reflected in the regulations and structures that surround the educational system of each country. In order to facilitate comparison between different educational systems, UNESCO developed the International Standard Classification of Education (ISCED) in the 1970's (UNESCO, 2014). The classification has, of course, been regularly updated to accommodate for the changes that have inevitably taken place over the past decades. Unfortunately, many academic publications do not refer to the classification scheme, thus making the comparison between contexts and definitions of different studies much harder. We do believe that many studies provide us with valuable and generalizable insights related to the potential causes and consequences of the problem of ESL and drop-outs, as well as the process by which it takes place. We therefore included these studies in the current state-of-the-art report. However, in order to allow for more scientific rigor, we provided the readers of this report with a proper set of definitions and the necessary information concerning the context of the TICKLE project. This will allow the readers to adequately situate, understand and evaluate the information presented in this report.

Contextualizing the TICKLE project

The TICKLE project focuses on drop outs living in the region of Brussels-Capital. Within Belgium, the region enjoys a moderate amount of political powers. These powers are connected with the territory, thus including domains such economy, employment, agriculture, etc. However, governmental powers relating to education are distributed among the federal government, the communities, the provinces and the communes (Belgian Federal Government, 2016). Furthermore, since Belgium is a member state of the European Union, the governing bodies of Brussels-Capital also operate within the confines of European legislations. It is undoubtedly clear that this deeply nested position makes the context of the Brussels-Capital region a fairly complex one.

Definitions

Fortunately, the governing bodies of Belgium and Brussels-Capital adhere strongly to the Europe 2020 Strategy. The strategy's main directives for educational policy include the reduction of the average European rate of early school leavers to less than 10% by 2020 (European Council, 2010). In their report '*Reducing early school leaving: Key messages and policy support*', the Thematic Working Group on Early School Leaving (2013) provides a definition of ESL and stresses how it overlaps and differs from dropping out.

Early School Leaving

The authors of the report point out that "*the definition of 'early school leaving' used at EU level refers to 'those young people who leave education and training with only lower secondary education or less, and who are no longer in education and training'*" (ibid, p.8). More specifically, the label 'early school leaver' refers to persons of 18 to 24 year old who fulfill both of the following

conditions: “(1) the highest level of education or training attained is ISCED 0, 1, 2 or 3c short, (2) no education or training has been received in the four weeks preceding the survey” (ibid).

Dropping Out

In contrast to ESL, which “*may include all forms of leaving education and training prematurely*” (ibid), the authors of the report define the dropping out of school as “*discontinuing an on-going course, e.g. dropping out in the middle of the school term. Drop-out from education can occur at any time and can be experienced by different age groups*” (ibid). Based on these definitions, many of the studies that will be discussed in the current report seem to address ESL in general rather than the specific case of ESL referred to by the term ‘dropping out’. We will therefore continue to talk about ESL instead of ‘dropping out’. It is our opinion that we will gain more useful insights focusing on the issues related to the broader phenomenon of ESL.

Prevalence

In order to provide a more complete picture of the context surrounding the TICKLE project, we present additional information about the prevalence of ESL in Europe, Belgium and Brussels. This information will help to show relative magnitude of the problem of ESL in the Brussel-Capital region.

Europe

Since the Europe 2020 Strategy was ratified by the member states of the European Union, the average rate of early school leavers across the EU has steadily declined from 14,3% all 18 to 24 year olds in 2009 to 11,0% in 2015 (see Table 1 and Figure 1). Note that the group studied in 2015 represents an almost entirely new cohort, since those who were 18 of age in 2009 would have turned 24 in 2015. This also means that the composition and size of the cohort group might have

changed, which is indeed the case. In 2009, all 18 to 24 year olds living in Europe accumulated to a total of approximately 43 464 476 people, whereas the cohort of 2015 counted 40 360 906 people (Eurostat, 2016a). Despite the fact that the cohort of 2015 was 1,1 million people smaller, the declined percentage of ESL still represents an impressive shift in absolute numbers from 6 215 420 young adults in 2009 to 4 439 700 in 2015. In others words, if we compare the size of the group of ESL from both cohorts, we see that the total number of ESL has dropped by almost one third. Thus, it seems that the cohort that emerged with the Europe 2020 Strategy is faring quite well.

Belgium

If we take a closer look at the Belgian section of this cohort of European citizens aged 18 to 24 years old, we see a different trend. Whereas 2015 cohort was considerably smaller in Europe as a whole, the Belgian cohort was actually slightly larger. In 2009 the total number of young adults in Belgium accumulated tot 914 049 persons compared to the 954 195 people in the 2015 cohort (ibid). As a consequence, the small decline in ESL from 11,1% to 10,1% is perhaps even more disappointing. Indeed, if we bear in mind that in the given situation a virtual standstill in absolute numbers of ESL would have still represented a decrease of approximately 0,5%. Looking at the absolute numbers, we can see that the absolute volume of ESL only reduced by one twentieth from 101 459 people in 2009 to 96 374 in the cohort of 2015. Belgium thus seems to be making slow progress in terms of lowering the ESL rate among young adults.

Figure 1 – ESL trend line comparison between EU27 and Belgium based on the figure represented in Table 1

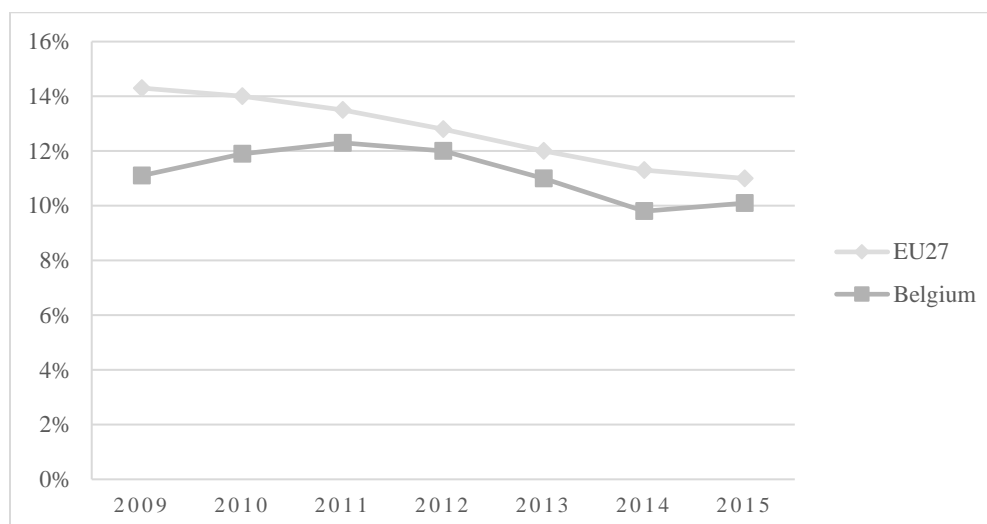


Table 1 - The indicator is defined as the percentage of the population aged 18-24 with at most lower secondary education and who were not in further education or training during the last four weeks preceding the survey. Lower secondary education refers to ISCED 2011 level 0-2 for data from 2014 onwards and to ISCED 1997 level 0-3C short for data up to 2013. The indicator is based on the EU Labour Force Survey. (Eurostat, 2015) *AGR = Average Growth Rate; **GRV = Growth Rate Variance; ***NR = Net Result

	2009	2010	2011	2012	2013	2014	2015	AGR*	GRV**	NR***
EU27	14,3	14,0	13,5	12,8	12,0	11,3	11,0	-0,55	0,04	-3,3
Portugal	30,9	28,3	23,0	20,5	18,9	17,4	13,7	-2,87	1,72	-17,2
Spain	30,9	28,2	26,3	24,7	23,6	21,9	20,0	-1,82	0,23	-10,9
Turkey	44,3	43,1	41,9	39,6	37,5	38,3	36,4	-1,32	1,07	-7,9
Norway	17,6	17,4	16,6	14,8	13,7	11,7	10,2	-1,23	0,38	-7,4
Cyprus	11,7	12,7	11,3	11,4	9,1	6,8	5,3	-1,07	1,50	-6,4
Greece	14,2	13,5	12,9	11,3	10,1	9,0	7,9	-1,05	0,11	-6,3
Malta	25,7	23,8	22,7	21,1	20,5	20,3	19,8	-0,98	0,37	-5,9
United Kingdom	15,7	14,8	14,9	13,4	12,3	11,8	10,8	-0,82	0,25	-4,9
Ireland	11,7	11,5	10,8	9,7	8,4	6,9	6,9	-0,80	0,31	-4,8
Macedonia	16,2	15,5	13,5	11,7	11,4	12,5	11,4	-0,80	1,07	-4,8
Italy	19,1	18,6	17,8	17,3	16,8	15,0	14,7	-0,73	0,25	-4,4
Latvia	14,3	12,9	11,6	10,6	9,8	8,5	9,9	-0,73	0,95	-4,4
Switzerland	9,1	6,6	6,3	5,5	5,4	5,4	5,1	-0,67	0,74	-4,0
Denmark	11,3	11,0	9,6	9,1	8,0	7,8	7,8	-0,58	0,25	-3,5
Lithuania	8,7	7,9	7,4	6,5	6,3	5,9	5,5	-0,53	0,06	-3,2
France	12,4	12,7	12,3	11,8	9,7	9,0	9,3	-0,52	0,65	-3,1
Netherlands	10,9	10,0	9,2	8,9	9,3	8,7	8,2	-0,45	0,18	-2,7
Iceland	21,3	22,6	19,7	20,1	20,5	19,1	18,8	-0,42	1,90	-2,5

Croatia	5,2	5,2	5,0	5,1	4,5	2,7	2,8	-0,40	0,45	-2,4
Estonia	13,5	11,0	10,6	10,3	9,7	11,4	11,2	-0,38	1,48	-2,3
Austria	8,8	8,3	8,5	7,8	7,5	7,0	7,3	-0,25	0,14	-1,5
Bulgaria	14,7	12,6	11,8	12,5	12,5	12,9	13,4	-0,22	0,94	-1,3
Germany	11,1	11,8	11,6	10,5	9,8	9,5	10,1	-0,17	0,42	-1,0
Belgium	11,1	11,9	12,3	12,0	11,0	9,8	10,1	-0,17	0,54	-1,0
Finland	9,9	10,3	9,8	8,9	9,3	9,5	9,2	-0,12	0,24	-0,7
Slovenia	5,3	5,0	4,2	4,4	3,9	4,4	5,0	-0,05	0,27	-0,3
Poland	5,3	5,4	5,6	5,7	5,6	5,4	5,3	0,00	0,02	0,0
Sweden	7,0	6,5	6,6	7,5	7,1	6,7	7,0	0,00	0,25	0,0
Hungary	11,5	10,8	11,4	11,8	11,9	11,4	11,6	0,02	0,22	0,1
Czech Republic	5,4	4,9	4,9	5,5	5,4	5,5	6,2	0,13	0,17	0,8
Luxembourg	7,7	7,1	6,2	8,1	6,1	6,1	9,3	0,27	3,10	1,6
Slovakia	4,9	4,7	5,1	5,3	6,4	6,7	6,9	0,33	0,15	2,0
Romania	16,6	19,3	18,1	17,8	17,3	18,1	19,1	0,42	1,61	2,5

Brussels

If we zoom in even closer, we see that like the general population of 18 to 24 year olds in Belgium, the cohort in the Brussels-Capital region has been steadily growing from 96 260 people in 2009 to 102 934 in 2015 (Algemene Directie Statistiek - Statistics Belgium, 2016). In 2009, the Brussel-Capital region already showed much higher ESL rates compared to Belgium as a whole with a troublesome 22,1%. Despite a considerable reduction by 6,3%, ESL rates in 2015 are still much higher than elsewhere in Belgium with 15,8% (Observatorium voor Gezondheid en Welzijn van Brussel-Hoofdstad, 2009; 2015; Sacco, Smits, Kavadias, Spruyt, & d'Andrimont, 2016). Given these trends, it is clear that reducing ESL is a major concern for policymakers and educational professionals in Brussels. There does seem to be a silver lining though, that is: Brussel-Capital region seems to be making much better progress in its efforts to reduce ESL. This becomes very clear when we take into account the absolute numbers related to ESL. Indeed, a status quo in absolute numbers would have only accounted for a reduction of 0,4% given the increased size of

the population. However, the total number of youngsters who left school without a degree dropped from 21 273 in 2009 to 16 264 in 2015, which represents a reduction by almost a quarter. This is, of course, significantly better than the ESL reduction recorded for Belgium during that period.

Consequences

It is difficult to make general claims about the consequences of ESL for a number of reasons. First of all, as we will see in the section *Predictors*, there are various reasons why people with a different or even the same social, cultural and economic background decide to leave school without a degree (see Rumberger, 1987). This variety undoubtedly also occurs when it comes to the consequences of that decision. Secondly, there is little or no longitudinal research that studies the effects of ESL on people's lives throughout adulthood. Studies that do focus on the consequences directly related to ESL mostly limit themselves to relatively short term follow-ups until the age of 30. As a result, we can only present a brief overview of the short term societal and individual consequences of ESL. In particular, we focus on three major problems that can be directly linked to ESL: unemployment, poverty and social exclusion (Thematic Working Group on Early School Leaving, 2013). These problems do not necessarily occur among all school dropouts, but they do often coincide.

The first and most visible problem that can be directly linked to ESL is *unemployment*. Due to trends like the increasing globalization and automation of production, as well as the economic crisis, jobs that require low-skilled laborers are rapidly disappearing (Thematic Working Group on Early School Leaving, 2013; Sacco, Smits, Kavadias, Spruyt, & d'Andrimont, 2016). This dramatically increases the risk of unemployment for school dropouts. A comparison of unemployment rates based on people's level of education makes this very clear (see also

Observatorium voor Gezondheid en Welzijn van Brussel-Hoofdstad, 2015). Among the EU citizens between 15 and 64 years old, 17,8% of those who had not finished secondary education (ISCED 2 or less) were unemployed by the beginning of 2015, compared to only 8,7% of the people who had attained a degree from upper secondary and post-secondary non-tertiary education (ISCED level 3 or 4) and 5,7% of the people who finished tertiary education (ISCED 5 and up) (Eurostat, 2016b). An almost identical picture presents itself in the case of Belgium: 17,0% (ISCED 0-2), 8,7% (ISCED 3-4), and 4,6% (ISCED 5-8). When we look at youngsters under 25, the situation seems to be even more precarious. While almost two thirds of these youngsters were still engaged in some kind of formal education or training in 2015, both in Belgium and the EU, more than 15% of the youngsters acquired the status of ‘neither in employment nor in education and training’ (NEET) (see Table 2). The NEET youngster represent more than one third of the population of EU and Belgian citizens between 18 and 24 years old who were not receiving any form of formal education or training. For the Brussels-Capital region, the percentage of NEET youngsters climbs to a troubling 21,8% (Eurostat, 2016c). Of course, not all NEET youngsters under 25 fall within the category of ESL and low educational attainment levels. However, if we zoom in on youngster who left school early, the results are even more dramatic. As shown in Table 3, only one third of the ESL youngsters was employed in 2015, while another third was unemployed but willing to work.

Table 2 – The indicator represents the percentage of the total population of people aged between 18 and 24 (anno 2015) who are: receiving training and employed (column 1), receiving training and unemployed (column 2), not receiving training and employed (column 3), not receiving training and unemployed (column 4) (Eurostat, 2016d).

	Training Employed	Training Unemployed	No training Employed	No training Unemployed
EU27	16,9	41,0	26,2	15,8
Belgium	5,0	52,4	27,1	15,5

Table 3 – The indicator represents the percentage of the total population of people aged between 18 and 24 (anno 2015) who have: left school early, are no longer receiving any form of formal training and are employed (column 1), left school early, are not receiving training, are unemployed but willing to work (column 2), left school early, are not receiving training, are unemployed and unwilling to work at the moment (column 3) (Eurostat, 2016e).

	ESL Employed	Willing to work	ESL Unemployed	Unwilling to work
EU27	4,6		6,4	
		4,3		2,1
Belgium	3,7		6,4	
		4,3		2,1

The second problem is the risk of *poverty*, which increases drastically as the risk of unemployment rises. However, compared unemployment, poverty is much harder to visualize in a single number. This is partly because definitions of what constitutes poverty might vary from country to country. The same applies for the third problem, which is *social exclusion*. Fortunately, the context of Belgium and Brussel-Capital Region does offer us some opportunities to find indicators. Given the scope of this section and the report that is part of, we will limit ourselves to a brief discussion of only one such indicator, namely the social security measure known as a ‘living wage’. In Belgium, the living wage measure is an integral part of the federal decree concerning the right to social integration and “*should be considered a last resort*” (Agentschap Informatie Vlaanderen, 2016). Indeed, among other criteria, the decree stipulates that a person can only be considered eligible for receiving a living wage after having first “*claimed all social benefits to which she or he is entitled according to the Belgian or foreign social laws*” [author translation] (Ministerie van Sociale Zaken, Volksgezondheid en Leefmilieu, 2002). In other words, people who are receiving a living wage are considered at high risk of becoming impoverished. The Federal Public Service for Social Integration, anti-Poverty Policy, Social Economy and Federal Urban Policy calculated that in 2015, 35,0% of low-skilled laborers and 42,9% of the unemployed

laborers in Belgium were at risk of becoming impoverished or socially excluded (POD Maatschappelijke Integratie, 2016a). In fact, the statistic overviews show that during 2015, 188 039 Belgian citizens received a living wage for a period of at least one month (POD Maatschappelijke Integratie, 2016b). Among those citizens were: 22 693 officially registered students, as well as 60 076 people who fell within the age range of 18 to 24. The latter accounts for 6,3% of the total population within that cohort. In Brussel-Capital region, 6 772 students received a living wage, as well as 15 291 (or 14,9%) of the people between the age of 18 and 24. Unfortunately, no detailed information is available on the relationship between ESL and living wages. We do know that current social welfare regulations in Belgium make it particularly hard for youngsters to acquire social benefits other than living wages, like for instance unemployment benefits. In light of the information that we have provided in this section, it is nonetheless clear that ESL puts youngster at a considerable risk of becoming impoverished or socially excluded (Vaesen, et al., 2014; Sacco, Smits, Kavadias, Spruyt, & d'Andrimont, 2016). This puts a heavy burden on the youngsters as well as society. In fact, while youngsters between 18 and 24 years old represent only 8,5% of the total population of Belgium anno 2015, this cohort accounts for 31,9% of all people how received a living wage during that year (Steunpunt tot Bestrijding van Armoede, Bestaansonzekerheid en Sociale Uitsluiting, 2016). We observe the same trend in the Brussels-Capital region, where youngsters between 18 and 24 represent 8,8% of the total population, while they amassed 30,5% of all living wages provided in this region in 2015.

Predictors

“Understanding why students drop out of school is a difficult if not impossible task because, as with other forms of educational achievement, it is influenced by an array of individual and institutional factors.” (Rumberger, 2001, p. 33)

The decision to leave school early is rarely made in an instant, but rather at the end of a long process of disengagement or withdrawal (Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989; Finn, 1989; Newmann, Wehlage, & Lamborn, 1992). In this section, we demonstrate that this is a very complex process that is influenced by wide variety of factors found in the students as well as their social environments. Given this variety of factors, a large body of academic literature exists on the topic of ESL and dropouts. Of course, many studies show significant overlap. Furthermore, the complexity of the phenomenon of ESL has been stressed even more as the list of possible factors continued to grow over the past few decades. As a consequence, many scholars have found it difficult – if not impossible – to provide conclusive empirical evidence that enables them to identify unique factors or combinations of factors that contribute to ESL. Based on his extensive review of ESL literature, Russell Rumberger (2001) suggests *“scholars are limited to developing theories and testing conceptual models based on a variety of social science disciplines and using a variety of qualitative and quantitative research methods”* (p.5) in order to properly address this complex problem. In the following subsections, we first present a small number of these conceptual frameworks to create a context for discussing the various factors that can be used to predict potential disengagement and ESL. Our discussion of these predictors is by no means exhaustive, as is the list of literary works addressed in this section. Nonetheless, we believe that our selection and discussion provides the reader with ample information to develop a proper insight into the current state of affairs in ESL research.

Conceptual Frameworks

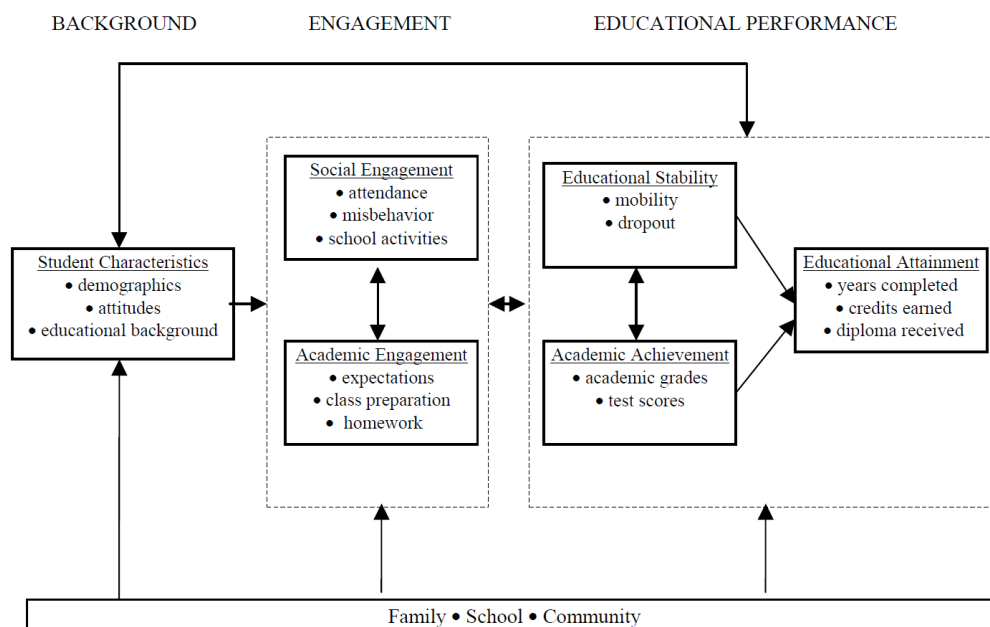
In this subsection, we briefly discuss three conceptual frameworks related to ESL risk factors. The first framework approaches ESL from the perspective of the individual student, focusing strongly on exhibited engagement. The second framework looks at ESL from an institutional perspective, focusing primarily on the influence of students' social environments. The third framework considers ESL in terms of self-determination, thus focusing on internal and external motivation. Our discussing of these frameworks will not touch upon the finer details like specific influencing factors since these are addressed in the next section of this report (see

Influencing Factors).

Individual Perspective

From an individual perspective, ESL is considered a problem of failing engagement as a result of poor prior experiences, achievements and aspirations. The framework presented in **Error! Reference source not found.** shows how engagement is divided into two dimensions: academic engagement on the one hand, and social engagement on the other hand (Rumberger & Larson, 1998). The framework suggests that we can assess students' engagement based on how they behave or express themselves in formal situations at school (i.e. during course hours, etc.) as well as informal situations involving peers or adults. According to the framework, students' behaviors and attitudes can have an influence on their academic achievements (i.e. how well they do on tests and other assignments), their educational stability (i.e. how long they stay enrolled at a particular school) and their educational attainment (i.e. how successful they are year after year). Given the focus on prior experiences and achievements, the framework seems build on ideas expressed by behavioristic theory (see: Skinner, 2011; Watson, 2013).

Figure 2 – Visualization of the conceptual framework for approaching ESL from an individual perspective. Source: Rumberger & Larson, 1998.

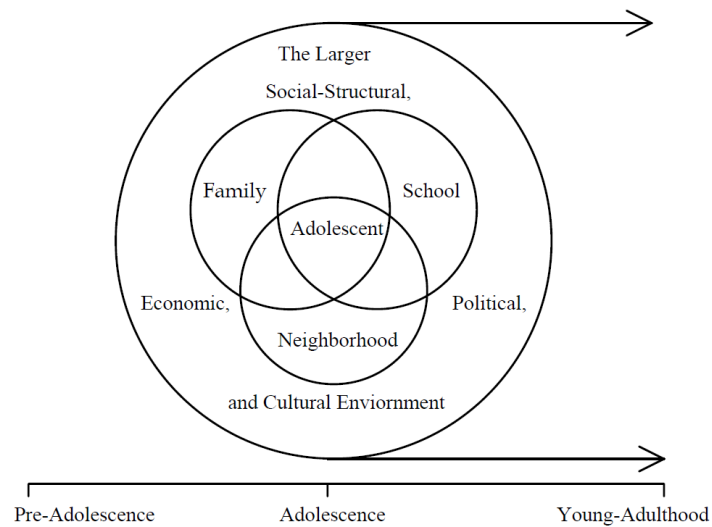


Institutional Perspective

From an institutional perspective, ESL is considered a problem of failing engagement inspired by the social contexts that students take part in. The framework presented in Figure 3 **Error! Reference source not found.** shows how adolescents develop within various institutional settings (i.e. family, school, community) that each contribute to the development of the youngsters' attitudes and behaviors (Jessor, 1993; Rumberger, 2001). Indeed, as we will see in the section

Influencing Factors, empirical studies on ESL have shown that students' engagement is influenced by elements or situations within their family life, school environment or communities. These micro contexts, in turn, are part of a larger cultural, socio-structural, political, and economical environment that shapes them. As such, this framework seems to borrow from social constructionist theory (see Burr, 2015).

Figure 3 – Visualization of the conceptual framework for approaching ESL from an individual perspective. Source: Jessor, 1993.

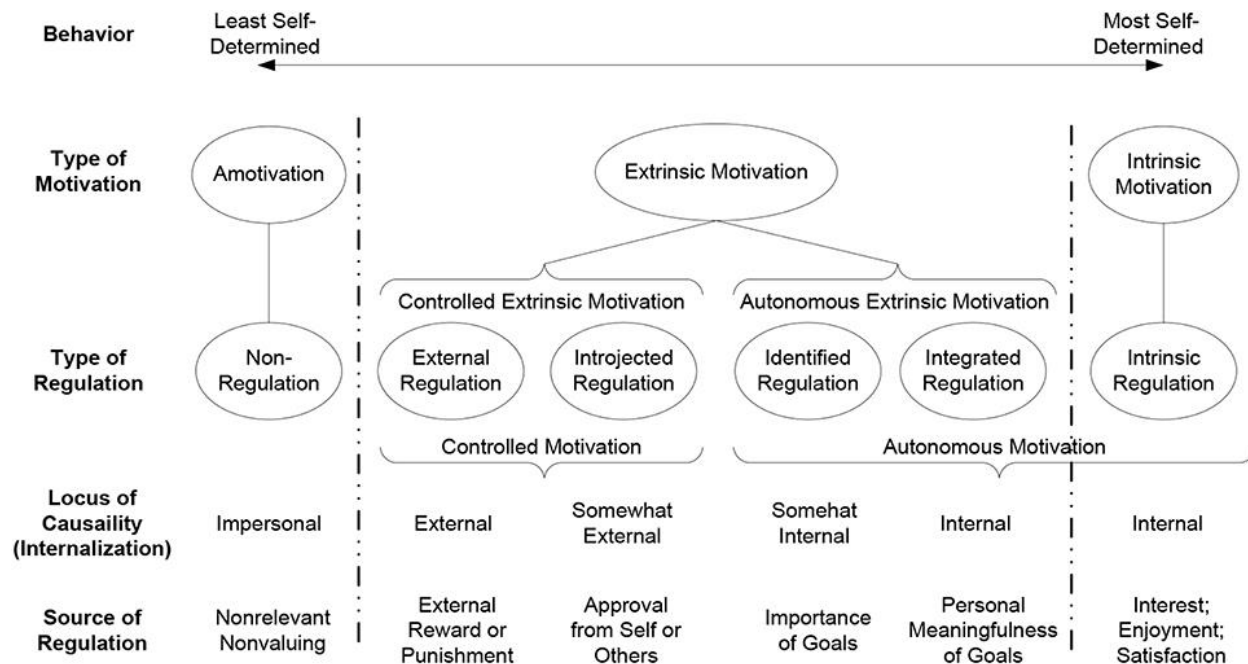


Self-determination Perspective

The self-determination perspective seems to merge both previous perspectives by placing engagement on a continuum. The perspective is based on self-determination theory (SDT) which differentiates between various types of motivation, ranging from amotivation over extrinsic motivation to intrinsic motivation (Deci & Ryan, 1985; 2000; 2008). As shown in Figure 4, this framework suggests that people's motivation, and thus their engagement, is influenced by how they perceived the cause and outcome of their behavior. According to the framework, amotivation is related to learned helplessness or the perception that one's behavior has no effect on whether or not an outcome is achieved. Students at this end of the spectrum would be generally unable to provide an answer as to why they go to school (Ricard & Pelletier, 2016). The feeling of incompetence and lack of control often results in depression and disengagement (Abramson, Seligman, & Teasdale, 1978; Nolen-Hoeksema, Girgus, & Seligman, 1986). In the case of extrinsic motivation, the locus of causality is also perceived as an outside source, particularly when a person exhibits forms of external regulation or introjected regulation. Students who exhibit the former

regulatory process would argue that they are forced to go to school by their parents or by society. Students who exhibit the latter form of regulation would go to school to avoid the guilt of not completing mandatory education. Other forms of external regulation, like identified regulation and integrated regulation, are associated with higher degrees of perceived autonomy. The locus of causality is still not fully internalized, but the impact of personal behavior on achieving a desired outcome is recognized (Vallerand & Ratelle, 2002). Students who exhibit identified regulation would accept that going to school is beneficial in order to achieve goals like getting a job to earn a living. For students who exhibit integrated regulation, those goals become personalized and meaningful. Finally, at other end of the continuum, in opposition of amotivation, is intrinsic motivation (Deci & Ryan, 1985; Vallerand, et al., 1993). Here, the perceived locus of causality is fully internalized. Students who exhibit internal regulation would attributed their engagement in school to the sheer enjoyment and satisfaction they experience by participating learning activities. It is clear that students at this end of the spectrum are far less likely to drop out of school early (Koestner & Losier, 2002; Alivernini & Lucidi, 2011).

Figure 4 – Visualization of the conceptual framework for approaching ESL from a self-determination perspective. Source: Clayton, 2015.



Influencing Factors

In this subsection, we discuss some of the influencing factors most commonly associated with ESL. Given the large body of academic literature on this topic and the often conflicting results, we rely primarily on the empirical evidence provided or discussed in literature reviews and follow-up studies. We have structured this section in light of the information provided in the *Conceptual Frameworks* section. We start by looking into external factors related to the macro environment. We then move on to external and internal factors related to the micro environment. Finally, we discuss external and internal factors related to the individual perspective.

Macro Environment

Socio-demographic Factors

There are several factors from the macro environment that might influence a person to decide to leave school earlier. Many of these factors are routinely included in studies on ESL under

the label socio-demographic information. Each factor relates to a socio-cultural construct that relies on a number of predefined characteristics that can be used to distinguish between groups of people. They include constructs like: gender, ethnicity, age, socioeconomic status (SES) and language proficiency. Although these constructs are often easy to operationalize and thus measure, most of them they seem to be only marginally conclusive in determining a person's risk of ESL (see also Dynarski & Gleason, 2002; Gleason & Dynarski, 2002; Hammond, Linton, Smink, & Drew, 2007; Bowers, 2010; Alivernini & Lucidi, 2011; Cratty, 2012; Doren, Murray, & Gau, 2014).

Gender

The results of many studies, including official reports from the European Union (Thematic Working Group on Early School Leaving, 2013), indicated that ESL occurs noticeably more among males than among females. Nonetheless, when gender is included in statistical models, tests often indicated it is not a strong predictor for ESL, neither as an isolated factor nor in combination with other risk factors (see e.g. Rumberger, 1983; Byrne & Smyth, 2010; Bowers, 2010; Doren, Murray, & Gau, 2014). Furthermore, the concept of gender as a dichotomous construct has been challenged in light of socio-cultural issues related to newly formed constructs such as transgender (see MacDonald, 1998; Burdge, 2007; Thanem, 2011). Issues like this help to stress the fact that the concept of gender is highly politicized and that occurrences of a 'gender gap' are the results of a broader and highly complex cultural phenomenon (see also Lorber, 1991; Ferree, Lorber, & Hess, 1999). As a consequence, gender does not seem to be an adequate or straightforward means of predicting the youngsters risk of ESL.

Ethnicity

Studies on ESL frequently include ethnicity among the demographic factors (see e.g. Rumberger, 1987; Bowers, 2010; Lemon & Watson, 2011; Schoeneberger, 2012; Doren, Murray, & Gau, 2014). This is the case especially when the population includes a large ethnic diversity like we see in Brussels-Capital region. Though these studies often do highlight differences between groups with different ethnic backgrounds, ethnicity by itself is seldom considered a good predictor for the risk of ESL (Rumberger, 1983; Barro, 1987; Cratty, 2012). Like the gender gap, discrepancies between different ethnic groups in terms of ESL represent the outcome of a large socio-cultural phenomenon. In combination with demographic information like SES and language proficiency, however, ethnicity does provide a reasonable means of predicting youngsters risk of ESL. When these factors are considered, studies often find that first generation immigrants experience a higher risk of ESL (White & Kaufman, 1997). These studies indicate ESL rates are much higher among the immigrant population, particularly when youngsters' family context is characterized by low SES and low proficiency with regards to the official language(s) used at school (Task Force Brussel, 2011; Vlaamse Onderwijsraad, 2013; Sacco, Smits, Kavadias, Spruyt, & d'Andrimont, 2016).

Socioeconomic Status

As previously indicated, many studies have found SES to be a strong predictor for the risk of ESL among youngsters (see e.g. Rumberger, 1983; Kolstad & Owings, 1986; Ekstrom, Goertz, Pollack, & Rock, 1986; Hayes, Nelson, Tabin, Pearson, & Worthy, 2002; Christle, Jolivette, & Nelson, 2007; Hammond, Linton, Smink, & Drew, 2007; Whannell & Allen, 2011). Studies show that SES and ESL are negatively correlated. In other words, ESL rates increase when the SES of the youngsters' families decreases. In contrast to factors like gender and ethnicity, SES is

determined based on a combination of measurements, including family income, educational and occupation attainment levels of the parents, etc. As such, they represent a reasonable means of predicting the risk of ESL. Nonetheless, researchers have shown that SES should not be considered in isolation when assessing the risk of ESL (Reyes & Jason, 1993; Reyes, 1993; Christle, Jolivet, & Nelson, 2007). Much like with gender and ethnicity, the relationship between SES and ESL prevalence often reflects the presences of a broader socio-cultural problem (Alivernini & Lucidi, 2011). Hoff, Olson and Peterson (2015) argue, for instance, that “*placing students in low academic tracks, negative peer relationships, and poor neighborhood environments are all factors that detrimentally affect students from low SES families*” (p.3).

Language Proficiency

Language proficiency is often considered a part of SES, though some studies on ESL focus on this factor separately (see e.g. Steinberg, Blinde, & Chan, 1984; White & Kaufman, 1997). This especially the case for studies in the context of Belgium and Brussel-Capital region (Task Force Brussel, 2011; Vlaamse Onderwijsraad, 2013; Sacco, Smits, Kavadias, Spruyt, & d’Andrimont, 2016). While this risk factor can also not be considered in total isolation, its relationship to other risk factors goes beyond the ones previously discussed. Language proficiency can have a large impact on youngsters’ academic achievements (Graham, 1987; Trueba, 1987; Cummins, 2000; Gottlieb, 2006; Friedberg, Mitchell, & Brooke, 2016). After all, a student’s understanding and mastery of the ‘education language’ determines, among others things, how well she or he is able to comprehend the instructions and learning materials provided in the classroom.

Age

A last socio-demographic risk factor that is included in every study is age. Various studies indicate that age and the risk of ESL are positively correlated (Bowers, 2010; Schoeneberger, 2012;

Sparks, 2013; Hoff, Olson, & Peterson, 2015). This means that the chances of dropping out increase as youngsters grow older. The studies also show, however, that age in itself is not a good predictor of ESL. They agree that ESL is the result of a lengthy cumulative process of disengagement that is fueled by other factors like academic achievements, retention, school climate, etc. (Schoeneberger, 2012; Hoff, Olson, & Peterson, 2015). That is, of course, why young students who are at the beginning of their academic career are less likely to drop out. Nonetheless, some results indicate that drop outs start to occur more frequently at ages as young as 12 years old and peak around the age of 16 “*with almost 45% of students with low grades at risk of dropout*” (Bowers, 2010, p. 197; see also: Sparks, 2013).

Micro Environment

Given the complex nature and low predictive value of risk factors from the macro environment, many studies have focused on other means to determine the risk of ESL. These include factors like family, school and peers. The combination of these factors makes up the youngsters’ micro environment or social support networks. Research has shown that these factors are strongly related to ESL and can be used to predict youngsters’ risk of dropping out of secondary education without a degree (see e.g. Rumberger, 2001; Whannell & Allen, 2011; Alivernini & Lucidi, 2011; Doren, Murray, & Gau, 2014; Hoff, Olson, & Peterson, 2015; Ricard & Pelletier, 2016). An added benefit of these risk factors is that they can often be addressed directly to reduce the risk of ESL (Bloom, 2010; Doren, Murray, & Gau, 2014), whereas factors from the macro environment are much harder to alter or counteract (Rumberger, 2001).

Family Factors

Family factors generally relate to the support that youngsters receive at home with respects to their formal education. These factors include aspects such as: parent involvement in their child's Individualized Education Program as well as school activities; parent expectations regarding their child's academic achievements and future prospects; home-based support for schooling as well as basic psychological needs like autonomy, competence and relatedness. A large number of studies have examined the impact of these factors on ESL and found that they have a significant positive influence (see e.g. Kortering & Braziel, 1999a; 1999b; Battin-Pearson, et al., 2000; Jimerson, Egeland, Sroufe, & Carlson, 2000; Furrer & Skinner, 200; Murray & Naranjo, 2008; Dalton, Glennie, Ingels, & Wirt, 2009; Chen & Gregory, 2010; Fan & Williams, 2010; Alivernini & Lucidi, 2011; Ricard & Pelletier, 2016). In other words, a positive increase in each of these factors results in a decreased risk of ESL.

In some case the items included in the SES measurements are also considered part of the family factors that influence ELS (Rumberger, 1987). However, given the SES items' shortcomings as a predictor of the risk of ESL and their intricate relationship to larger socio-cultural issues (see section *Socioeconomic Status*), it seems better not to include them as part of the micro environmental factors.

School Factors

School factors primarily relate to the support that youngsters receive at school, specifically from the teaching staff. These factors include aspects like: balanced supervision; provision of interesting and challenging learning experiences; support for basic psychological needs like autonomy, competence and relatedness; creation of a safe and non-threatening environment for learning; respectful interaction; fostering a sense of belonging and acceptance. Absences of these

factors can impede a good student-teacher relationship (Hardre & Reeve, 2003; Reschly & Christenson, 2006; Austin & Benard, 2007; Appleton, Christenson, & Furlong, 2008; Alivernini & Lucidi, 2011; Whannell & Allen, 2011; Fall & Roberts, 2012; Doren, Murray, & Gau, 2014; Furrer, Skinner, & Pitzer, 2014; Ricard & Pelletier, 2016). Studies have shown that a poor student-teacher relationship can lead to low emotional engagement with school, decreased motivation and an increased risk of truancy (see e.g. Whannell & Allen, 2011; Doren, Murray, & Gau, 2014). In contrast, a good student-teacher relationship can help to facilitate positive outcomes for student who experience a problems or lack of support in their family situation (Whannell & Allen, 2011).

School factors can also relate to the structure and state of the school in general, including things like organization; student-teach ratio; leadership; staff commitment; cleanliness; encouragement of staff risk-taking, self-governance and collegial support (Fine, 1986; Rumberger, 2001; Christle, Jolivette, & Nelson, 2007; Whannell & Allen, 2011). Many of these factors affect teachers first by increasing or decreasing the potential for teachers to develop a good student-teacher relationship. We do not include peer relations into this factor. Instead, we discuss them as a separate set of factors since these relationships often extend beyond the school (see section *Peer Factors*).

Peer Factors

A last and important set of factors from the youngsters' micro environment is related to their peers. Peer relationships exist both within and outside of school, but also in the family (i.e. brothers and sisters). Because peer relationships are not restricted to one domain of the youngsters' social life and often consist largely of informal contacts, these factors are rather harder to study. Nonetheless, these relationships play an important role many of the life choices the youngsters make, including the choice of ESL. Peer relationships can consist of, on the one hand, providing

emotional and educational support or an example to look up to; or, on the other hand, aggression, stress and negative examples. Studies have found that maintaining positive relationships with peers and feeling accepted by them can help to facilitate school transitions (see e.g. Hoff, Olson, & Peterson, 2015); to increase academic performance (see e.g. Guay, Boivin, & Hodges, 1999; Flook, Repetti, & Ullman, 2005; Ricard & Pelletier, 2016); to increase engagement in extracurricular activity (see e.g. Juvonen, Espinoza, & Knifsend, 2012); and to provide a sense of belonging (see e.g. Guay, Boivin, & Hodges, 1999; Reschly & Christenson, 2006; Doren, Murray, & Gau, 2014). In contrast, having few or negative relationships with peers, as well as having relationships with peers who have already dropped out of school can increase the risk of ESL (see e.g. Parker & Asher, 1987; Ellenbogen & Chamberland, 1997; Jimerson, Egeland, Sroufe, & Carlson, 2000; Farmer, et al., 2003; Furrer, Skinner, & Pitzer, 2014; Yang, Wen, & Rose, 2014).

Individual Characteristics

Apart from environmental risk factors, individual characteristics of the youngsters also affect their decision of ESL. The individual factors include aspects such as academic achievement and motivation. Many studies have established a clear correlation between these individual factors and the risk of ESL (see e.g. Ekstrom, Goertz, Pollack, & Rock, 1986; Reyes, 1993; Janosz, LeBlanc, Boulerice, & Tremblay, 1997; Alexander, Entwisle, & Kabbani, 2001; Rumberger, 2001; Jimerson, Anderson, & Whipple, 2002; Balfanz, Herzog, & Mac Iver, 2007; Heppen & Therriault, 2008; Bowers, 2010; Alivernini & Lucidi, 2011; Bruce, Bridgeland, Fox, & Balfanz, 2011). As with many of the aforementioned factors, the predictive value of these individual factors is rather low when considered in isolation (Dynarski & Gleason, 2002; Gleason & Dynarski, 2002; Hammond, Linton, Smink, & Drew, 2007; Christle, Jolivet, & Nelson, 2007). Though these

factors are often influenced by environmental factors, their assessment is crucial in the process of screening for ESL risks. In fact, they often provide a first clear indication that youngsters are experiencing problems in one or more life domains that might lead to an increase of the risk of ESL. This indication would then warrant further research.

Academic Achievements

The factor of academic achievement refers to measurements such as teacher assigned grades and test scores, as well as grade retention. Many studies include some or all of these measures in their assessment of the risk of ESL (see e.g. Borus & Carpenter, 1984; Ekstrom, Goertz, Pollack, & Rock, 1986; Wehlage & Rutter, 1986; Lee & Burkam, 1992; Reyes, 1993; Heppen & Therriault, 2008; Pinkus, 2008; Sparks, 2013). Invariably, these studies show that academic achievements are a good predictor for ESL, though the results are often much more significant in studies with a longitudinal design (see e.g. Ensminger & Slusarcick, 1992; Alexander, Entwisle, & Kabbani, 2001; Balfanz, Herzog, & Mac Iver, 2007; Neild, Balfanz, & Herzog, 2007; Bowers, 2010; Bruce, Bridgeland, Fox, & Balfanz, 2011; Alivernini & Lucidi, 2011; Doren, Murray, & Gau, 2014). These longitudinal studies point out that point out “*grades are a more reliable predictor of dropout, as they measure student progress over time and do not rely solely on the student’s performance on one day in a given year*” (Hoff, Olson, & Peterson, 2015, p. 3). This makes the academic achievement factor an interesting predictor for the risk of ESL. It is also important to note that various researchers have argued that measurements like teacher assigned grades represent more than just academic aptitude. According to these researchers grades also reflect teachers assessment of aspects like attendance, behavior, participation, motivation, study skills, and perseverance (Cross & Frary, 1999; Cizek, 2000; Farrington, et al., 2012). In combination with the ability to reflect student’s progress, the multidimensional nature of teacher assigned grades (and

other measurements of academic achievement) might explain why grades often appear to be such good predictors of ESL. Furthermore, the argument regarding the multidimensional nature of academic achievement measures strengthens our claim that individual factors are crucial in the assessment of ESL risks. Indeed, Doren, Murray and Gau (2014) argue that factors related to the individual, such as academic achievement, “*carry additional information about students that can be targeted in prevention and intervention efforts*” (p. 156).

Motivation

In the section *Self-determination Perspective* we explained that motivation should be considered as a continuum ranging from amotivation via extrinsic motivation to intrinsic motivation. Like academic achievements, this factor can be viewed as a measurable outcome of a combination of other factors like peer relationships, parent support, teacher support, previous academic achievements, etc. (Hoff, Olson, & Peterson, 2015). Motivation can be measured by assessing students’ behavior in terms of absenteeism, truancy, or discipline problems. Various studies have pointed out a positive correlation between these behavioral problems and the risk to ESL (see e.g. Bachman, Green, & Wirtanen, 1971; Wehlage & Rutter, 1986; Simmons & Blyth, 1987; Kazdin, 1993). This means that an increase of these behaviors generally leads to an increased probability of ESL. Unfortunately, this approach to measuring observation does not consider the complexity of the motivation spectrum and reduces it to a dichotomous concept (i.e. amotivation vs. motivation). Because of the reduced complexity, the behavioral approach cannot account for situations like disability or severe and chronic illness. These issues might indeed decrease motivation and thereby increase the risk of ESL, especially when they also affect test scores, grades, or grade retention (Simmons & Blyth, 1987; Cairns, Cairns, & Neckerman, 1989; Achenbach, Howell, Quay, Conners, & Bates, 1991; Kazdin, 1993; Offord & Fleming, 1995; Alexander,

Entwisle, & Horsey, 1997; Eccles, 1999). Nonetheless, studies have shown that this is not necessarily always the case (see e.g. Dunn, Chambers, & Rabren, 2004; Wagner, Newman, Cameto, Garza, & Levine, 2005; Zablacki & Krezmien, 2013). Therefore, in addition or as an alternative to behavioral observation, researchers and educators can also use questionnaires or interviews to gain a deeper insight into youngsters' motivation (see e.g.: Hardre & Reeve, 2003; Appleton, Christenson, & Furlong, 2008; Alivernini & Lucidi, 2011). Studies that use these techniques and consider the full spectrum of motivation have found clear correlations between motivation and how youngsters experience parental and teacher support (Alivernini & Lucidi, 2011; Fall & Roberts, 2012; Doren, Murray, & Gau, 2014; Hoff, Olson, & Peterson, 2015; Ricard & Pelletier, 2016). They show that proper support from the micro environment leads to increased self-perception and identification with the school, which, in turn, increase identified and integrated self-regulation.

Summary

In this report, we have presented the results of our extensive literature study on ESL and school dropouts. The report covered two major topics: (1) the prevalence of ESL in Europe, Belgium and Brussels as part of the contextualization of the TICKLE project, and (2) the predictive value of factors that influence youngsters' decision of ESL.

The findings with regard to the prevalence of ESL in Belgium indicate that efforts to reduce school dropouts in accordance with EU 2020 goals seem to have had rather disappointing results. Compared to many of the other member states of the EU, Belgium has seen a very minute decrease of the number of youngster between 18 and 24 who leave secondary education without a degree. In contrast, ESL rates for the Brussels Capital Region have seen a considerable reduction, both in percentages and absolute numbers. However, compared to the other major regions in Belgium, Brussels Capital Region still records the highest ESL rates within Belgium. In 2015, up to 15,8% or 16 264 people between 18 and 24 had left school without a degree. This problematic situation is also reflected by the numbers related to the known direct consequences of ESL, such as unemployment and poverty. In Brussels, for example, two third of the dropouts was unemployed in 2015. We also noted that youngsters between 18 and 24 amassed 30,5% of all living wages provided in Brussels in 2015, even though this cohort only represents 8,8% of the total population in the region. Besides 6 772 students, this group also contains 8 519 people who were no longer studying also made use of this last resort of the social security system.

The findings with regard to the predictive value of factors that influence youngsters' decision to drop out indicate that ESL is a complex problem. Empirical studies have shown that ESL is the result of a cumulative process that can even commence several years before youngsters enter secondary education. These studies also show that a very large variety of factors

can play a role in the decision of ESL. These influencing factors can be categorized into three major groups in accordance with theoretical perspectives that consider the youngsters' macro environment, micro environment or individual characteristics. In relation to the youngsters' macro environment, we have discussed socio-demographic factors such as gender, ethnicity, SES, age, and language proficiency. Empirical studies have clearly indicated that these factors have a very low predictive value in relation to ESL, especially when considered in isolation. Nonetheless, language proficiency does appear to have a higher predictive value given its frequent high impact on academic achievements. Our discussion of the youngsters' micro environment focused on their social contacts related to family, school and peers. Empirical studies have shown that factors related to each type of these contacts have a rather high predictive value. Furthermore, the empirical evidence also suggests that these factors can help to significantly reduce the risk of ESL in light of other problems that can lead to decision to drop out. Finally, we discussed academic achievements and motivation as the two major individual characteristics that can influence youngsters' decision of ESL. Like all other factors, neither of these factors is conclusive in terms of predicting ESL. They are, however, good indicators of the longitudinal and cumulative nature of the process that lead to the decision of ESL. In addition, these factors are also routinely checked within most current school systems. As a consequence, scholars have recommended to use this information in screening and prevention programs to enable early detection and remediation.

Conclusions

The increasing demand for skilled laborers has heightened policymakers' attention for ESL that increases youngsters' risk of becoming unemployed and poor. In the first section of this paper, we showed that the prevalence of ESL is indeed quite high in Belgium, and particularly in Brussels. We also point out that the decision to drop out of school without a degree has clear consequences for youngsters. The statistical data presented in the first section clearly indicates that youngsters who left school early have significantly more problems finding a job compared to their peers who did complete secondary education. As the data also shows, this situation often requires dropouts to rely heavily on social security measures, including the last resort known as living wages. In light of these issues, many governments – including the members of the European Union – have put the goal of reducing ESL high on their political agenda.

Over past decades, the increasing attention for ESL has been clearly reflected in the increasing number of studies on this topic. In the second section, we presented a brief overview of the insights gained from the academic literature that resulted from these studies. The wide variety of influencing factors that scholars have studied and discussed indicates just how complex ESL exactly is. The process that leads to ESL represents a mix of interactions between youngsters' individual characteristics, their micro environment (i.e. family, school and peers) and the macro environment (i.e. broader cultural and socio-economic context). Based on the available empirical evidence, we have argued that some factors have a higher predictive value than others in relation to ESL. This is mostly the case for factors that can be measured over time, thus allowing a longitudinal approach. Nonetheless, as many studies have pointed out, none of the factors can be considered in complete isolation to make reliable predictions.

Despite many good efforts and the large body of research of ESL, progress is still slow. Perhaps progress is slow due to the complexity of this cumulative process, which makes it hard to develop accurate screening tools and successful prevention programs. Considering the insights gained from this report, screening tools should rely on a multitude of data that is acquired as soon as the youngsters start school and is then regularly updated throughout their academic career. By taking this broad approach, the screening tools can help educators to determine what should be the focal points of the prevention program. Like the screening tools, the prevention programs should include as many of the known influencing factors as possible to reverse the cumulative process of school burnout that leads to ESL. Indeed, as is clear from the evidence discussed in this report, youngsters' perception of school and the necessity of a degree is strongly and equally influenced by teachers, parents and peers, as well as youngsters' own experiences in and outside of school. This will inevitably require educators to design interventions that extend beyond the school walls.

Uitgebreide Nederlandse samenvatting

De toenemende vraag naar geschoolde werknemers heeft het probleem van vroegtijdig schoolverlaten (ESL) op de politieke agenda van heel wat landen geplaatst. Uit statistische data blijkt immers dat jongeren die het secundair onderwijs verlaten zonder een diploma een verhoogd risico lopen op langdurige werkloosheid. Die data tonen ook aan dat jongeren hierdoor meer kans lopen om in de armoede terecht te komen of afhankelijk te worden van hulpmiddelen uit het sociale zekerheidstelsel, zoals het leefloon. In het licht van deze vaststelling hebben verscheidene overheden – inclusief de deelstaten uit de Europese Unie – zich tot doel gesteld de het aantal vroegtijdige schoolverlaters te verlagen. De voorbije jaren zijn er daarom heel wat studies uitgevoerd naar de oorzaken en gevolgen van ESL.

Het TICKLE project kwam tot stand in het kader van de EU beleidsmaatregelen en tracht een oplossing voor het probleem van schoolmoeheid en ESL te ontwikkelen. Om een beter zicht te krijgen op de omvang en aard van het probleem hebben voerden we een uitgebreide literatuurstudie uit die we hebben voorgesteld in dit rapport. Het rapport omvat twee grote thema's: (1) de prevalentie van ESL in Europa, België en Brussel met het oog op de contextualisering van het TICKLE project, en (2) de voorspellingskracht van de factoren die invloed hebben op de beslissing van jongeren om het onderwijs vroegtijdig te verlaten.

Uit de bevindingen met betrekking tot de prevalentie van ESL in België blijkt dat de geleverde inspanningen om schooluitval te verminderen eerder teleurstellende resultaten hebben behaald. In het kader van de EU 2020 doelstellingen en in vergelijking met vele lidstaten van de EU kon België slechts een zeer beperkte daling laten optekenen van het aantal jongeren tussen 18 en 24 die het secundair onderwijs verlaten zonder diploma. In het Brussels Hoofdstedelijk

Gewest zijn de resultaten iets bemoedigender. Daar werd een aanzienlijke daling vastgesteld, zowel procentueel gezien als in absolute cijfers. Desondanks doet de regio Brussel het toch nog steeds een stuk slechter dan de overige regio's in België. In 2015 verlieten in het Brussels Hoofdstedelijk Gewest tot 15,8% of 16 264 personen tussen 18 en 24 het secundair onderwijs zonder diploma. Deze problematische situatie wordt ook weerspiegeld in het cijfermateriaal betreffende de gekende rechtstreekse gevolgen van ESL, zoals werkloosheid en armoede. Een voorbeeld hiervan is onder meer de werkloosheidsgraad van twee op drie bij vroegtijdige schoolverlaters in de regio Brussel in 2015. We stellen ook vast dat in 2015 30,5% van alle leeflonen in Brussel werden toegekend aan jongeren tussen 18 en 24, en dat terwijl dit cohort amper 8,8% van de totale bevolking in deze regio vertegenwoordigd. Naast 6 772 studenten maakten ook 8 519 jongeren die niet meer studeerden gebruik van dit laatste redmiddel binnen het sociale zekerheidssysteem.

Uit de bevindingen aangaande de voorspellingskracht van beïnvloedende factoren met betrekking drop-outs blijkt dat ESL een bijzonder complex probleem is. Empirische studies hebben aangetoond dat ESL het resultaat is van een cumulatief proces dat kan aanvangen ruim voordat jongeren hun schoolcarrière starten in het secundair onderwijs. Deze studies tonen ook aan dat een zeer grote verscheidenheid aan factoren een rol kunnen spelen in de beslissing om de school vroegtijdig te verlaten. Deze beïnvloedende kunnen ingedeeld worden in drie voorname groepen, en dit in overeenstemming met theoretische perspectieven inzake ESL. De groepen bestaan uit factoren uit de macro omgeving van de jongeren, factoren uit hun micro omgeving en factoren die betrekking hebben op hun individuele kenmerken.

Factoren uit de macro omgeving van de jongeren omvatten sociaal-demografische eigenschappen zoals gender, etniciteit, sociaaleconomische status, leeftijd, en taalbeheersing. Empirische onderzoeken hebben duidelijk aangetoond dat deze factoren een eerder lage voorspellingskracht hebben met betrekking tot ESL, vooral wanneer ze afzonderlijk worden beschouwd. Taalbeheersing lijkt echter wel een hogere voorspellende waarde te hebben omwille van haar vaak hoge invloed op schoolprestaties.

Factoren uit de micro omgeving van de jongeren richten zich sociale netwerken bestaande uit contacten met het gezin, de school en leeftijdsgenoten. Empirische studies geven op dit vlak aan dat factoren gerelateerd aan deze sociale netwerken hebben een vrij hoge voorspellingskracht inzake ESL. De resultaten van deze studies suggereren bovendien dat deze factoren ook kunnen helpen bij het verminderen van het risico op ESL.

In dit rapport bespreken we ook twee voornamelijk individuele eigenschappen van jongeren die invloed kunnen hebben op hun beslissing om vroegtijdig de school te verlaten, meer bepaald schoolprestaties en motivatie. Zoals bij alle overige factoren stelt geen van beiden ons in staat om een sluitende voorspelling te maken van ESL risico's bij jongeren. De twee factoren geven evenwel duidelijk aan dat het proces dat leidt tot ESL een langdurig en cumulatief karakter heeft. Daarenboven worden beide factoren ook regelmatig gecontroleerd binnen de meeste huidige schoolsystemen. Op basis van deze vaststellingen hebben wetenschappers er nadrukkelijk op gewezen dat deze informatie zeker en vast moet worden opgenomen in screening en preventie programma's om zo vroegtijdige detectie en remediëring mogelijk te maken.

Op basis van de beschikbare empirische gegevens hebben vastgesteld dat een aantal factoren een hogere voorspellingskracht dan andere. Dit is voornamelijk het geval voor factoren

die gemeten kunnen worden over een langere periode waardoor een longitudinale benadering mogelijk wordt. Desalniettemin is het gebruik van één enkele factor uit den boze wanneer we betrouwbare voorspellingen willen maken. ESL is een complex probleem dat vraagt om een brede reeks screeningtools en maatregelen. Op basis van de inzichten uit dit rapport blijkt inderdaad dat screeningtools het meest succesvol zijn wanneer ze een uitgebreide reeks gegevens omvatten die worden verzameld zodra jongeren starten in het primair onderwijs en die regelmatig worden geüpdatet doorheen hun schoolcarrière. Dankzij een dergelijke benadering kunnen onderwijzers en pedagogen beter bepalen wat de aandachtspunten van het op maat gemaakte preventie- en remediëringsprogramma moet zijn. Deze programma's moeten, net zoals de screeningtools, gebruik maken van zoveel mogelijk gekende beïnvloedende factoren om het cumulatieve proces van schoolmoeheid dat leidt tot ESL tegen te werken. Een belangrijke vaststelling daarbij is het feit dat de perceptie van jongeren aangaande school en de noodzakelijkheid van een diploma sterk beïnvloed wordt door leerkrachten, ouders en leeftijdsgenoten, maar ook door hun ervaringen met leren en werken binnen en buiten school. Het is dan ook onvermijdelijk dat interventies verder moeten reiken dan schoolmuren.

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