

ABSTRACT

The aim of the research was to determine the variables, classified into different clusters that can lead to early school leaving.

I identified 85 variables from four different disciplines (pedagogy, sociology, psychology, psychiatry). Based on Diego González-Rodríguez et al. (2019), I grouped these variables into two clusters: I created an educational cluster with three factors (teachers, class, and segregation) and a non-educational cluster with three factors (individual, family, peers). Most of the factors attributed to the causes of early school leaving are related to the psychological and behavioral group of the individual. This classification can give us the reasons to early school leaving.

I performed literature review; I searched for studies in the international literature using Google Scholar, ERIC, ResearchGate, and ScienceDirect that were published between 2013 and 2021.

I also paid attention to the fact that some of the studies should be published in Q1-rated journals. The study completed in this way points to the causes of early school leaving across different disciplines, taking into account all possible perspectives.

Keywords: *early school leaving, literature review, individual, family, school*



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CAUSES OF EARLY SCHOOL LEAVING – LITERATURE REVIEW BETWEEN DIFFERENT DISCIPLINES I

Az idő előtti iskolaelhagyás okai

Uzroci ranog napuštanja školovanja

¹ The study was presented at the conference „Sustainable Heritage” organized by the Hungarian Language Teacher Training Faculty in Subotica in November 2021.

Introduction

Research over the past few decades has highlighted that early school leaving should be seen as a long - term process and not as an event, as early school leaving as an end result of academic failure begins in early childhood, often before a child enters school. So, early school leaving one of the biggest problem in the world not only Hungary. According to UNESCO report there are 26 million people in world, who only primary school completed. This number is very worrying, because it causes many undesirable consequences - both economically and socially. In Europe, 225,859 people, 93,427 female and 132,431 men dropped out from primary school in 2018 (Unesco,2018). As the data shows, men are more likely to drop out from school than women.

This long-term approach has greatly improved the understanding of the problem of early school leaving and the key implications of its prevention, as well as the fact that early school leaving does not affect all social groups in the same way, especially among economically, socially and culturally disadvantaged groups. Significant, which is why it should be seen as a central issue for educational equality and social justice

In this paper, I will analyze previous literature on school dropout and early school leaving. A great deal is being written and said about causes of early school leaving and dropout, but we build on this literature and identify the causes of early school leaving in Europe. Early school leaving has become an important research topic among education professionals (Gil et al. 2019). It is a considered problematic in countries across the world, not least because a lack of education and training has serious consequences for both the

individual who does not complete their education and for society as a whole (Gonzalez-Rodriguez et al. 2019). However, beyond this very basic commonality, there is a considerable number of definitions and measurement procedures (Vogt 2018). In the Eu context, the terms ‘dropout,’ ‘early school leaving,’ and ‘early school leaving from education and training’ have been used interchangeably throughout the 2000s (Vogt 2018). Lamb and Markusen (2011) explained the dropout definition. They found, that the dropout is a person who is no longer at school and does not hold an upper secondary qualification (Lamb & Markusen 2011). In European countries, early school leaving (ESL) has been defined differently. It is important to have a clear definition of early school leaving. The Statistical Office of the Eu (Eurostat) defines ESL with a focus on secondary education. The definition states that an early school leaver is a person aged 18-24 who has completed at most lower secondary education and is not involved in further education or training (Eurostat 2018). Although one group of EU countries, such as Hungary and Romania, use this definition, a second group, including Spain, Germany, Estonia, Greece, and Austria define the ESL as a student who leaves school without getting a compulsory education certificate (Gonzalez-Rodriguez et al. 2019). A third group of countries including the Netherlands define the early school leaver, as a student who does not get an upper secondary certificate (Gonzalez-Rodriguez et al. 2019). In contrast to the Statistical Office of the EU, Ireland and Scotland do not focus on defining ESL. They just focus on those people who leave as soon as they reach the age at which they can leave statutory education (Gonzalez-Rodriguez et al. 2019).

Current study

The first aim of this study is to identify the risk factors with the assistance of scientific literature. In most European countries, the average age of compulsory education is 18 years, but in some European countries, this age is 16 years. In these countries early school leaving is at higher rates, and some Central-East countries have a high proportion of Roma minorities, many of whom leave school without qualifications. The second aim of this study is to identify all the variables that influence early school leaving without qualifications. The third aim is to explore the causes of early school leaving in European countries. Many researchers recognized the problem of early school leaving and published in different disciplines (pedagogy, sociology, psychiatry). The problem has already been identified, but the relationship between different disciplines has not yet been explored.

Methods

Some studies provided a detailed approach to the causes of early school leaving (Gonzalez-Rodriguez et al. 2019; Ripamonti 2018; Gil et al. 2019; De Witte et al. 2013; Balkis 2018). These studies presented the causes of early school leaving through various models.

Results

The 85 variables found generated the studies in different disciplines: pedagogy, sociology, psychology and psychiatry. As could be expected, the studies analyzed do not give a comprehensive picture of the problem of early school leaving, although each study deals with this problem. The variables were classified into 4 factors based on De Witte et al. (2013). Personal factors contain 37 variables, which are grouped into three groups (psychological, behavioral and demographical) (see Table 1.) Family-includes 15 variables, along four groups (economics status, family structure, parent education and parent psychiatric problem) (see Table 2.) The school, with 16 variables, was classified into three groups (teachers, class and segregation) (see Table 3). Finally, learning and job opportunities included 17 variables into three groups (scholastic performance, group of peers and job) (see Table 4). The tables are provided for each factor. These determine the groups and subgroups by quoting variables.

Natalie Hoff et al. (2015) created the ABC model. This model includes 3 sections. The first section contains the absenteeism, and this factor is one of the most frequently studied factors that contribute to school dropout (Balkis 2018). The second section is behavior. There are many ways to measure student behavior. For example, the student's behavior may be classified as deviant behavior (alcohol and drug use, suicide, crime). The last one is the course performance. Academic success is a primary indicator of early school leaving at all levels of education. In this study, this model has joined to the academic and non-academic variables.

Despite increasing attention on the part of policy makers, school dropout is still a serious issue (De Witte et al.2013). Still, early school leaving is a major problem, but every continent has a different set of reasons. According to De Witte et al. (2013), 4 factors for school failure have been identified:

1. The student psychological and behavioral factors and demographic factors
2. family factors, family characteristics
3. type of school, structure of resources, social and academic environment and quality of teaching staff and teaching
4. community factors, neighborhood characteristics, job opportunities, student's motivation towards school and learning.

The first important group includes the student's psychological factors. Balkis (2018) pointed out that motivation plays a critical role in educational outcomes and he examined the relationship between motivation and school leaving. Some previous studies investigated the relationship between motivation and school dropout (Balkis 2018, Alivernini & Lucidi, 2011; Hardre & Reeve, 2003; Otis, Grouzet, & Pelettier, 2005; Ricard & Pelletier, 2016). Although these results signify that motivation plays a key role in school dropout, it is not clear what causes the student's lack of motivation (Balkis 2018). Balkis (2018) results indicate that a lack of motivation negatively affects academic achievement.

The second group is the behavioral factors. Attention-deficit hyperactivity disorder (ADHD) is described as the most common neurobehavioral condition of childhood (Furman, 2005). It is the group of symptoms representing behavioural, emotional, psychological and learning problems (Furman 2005).

Ronna Fried and et al. (2013) examined ADHD, as a risk factor for school dropout. One potentially modifiable risk factor that has been consistently associated with educational deficits is ADHD (Ronna Fried et al. 2013). Many studies show, ADHD is connected with school failure, poor grades, and academic attainment (Ronna Fried et al 2013; Faraone, Biederman, Doyle, et al., 2006; Barkley, Fischer, Smallish, & Fletcher, 2006). Long-term school outcomes, including grade retention and high school dropout, are 3 times more likely with ADHD (Ronna Fried et al 2013). Ronna Fried et al (2013) examined boys and girls with and without ADHD between the ages 6 and 17. They found there were no significant differences between boys and girls with and without ADHD on sex. Ronna Fried et al (2013) found that participants with ADHD are significantly more likely to have repeated a grade or failed to complete high school compared to participants without ADHD. Vitaro et al. (2005) revealed that ADHD is connected to school dropout. Sasser et al. (2016) think teenagers with ADHD leave school abortively. These findings confirm that ADHD is an independent risk factor for school dropout.

Substance use is another risk factor of early school leavers. Orpinas et al. (2016) Smoking tobacco is related to school dropout, and cannabis use emerged as a significant predictor for school dropout too (Orpinas 2016, Stiby et al. 2015). In addition, many researchers Ehrenreich, 2015; Meier, 2015; Wang and Friedrichs, 2014 showed a connection between marihuana use and school dropout, and the effect of cannabis might be confused with alcohol and nicotine consumption. Finally, the risk factor would emerge from emotional and cognitive investment in training processes.

The researchers focused on demographic factors. According to Ripamonti (2018), it has been argued that dropping out is more frequent among male students. In the United States of America, the ethnicity of students plays a particular role. The school dropout rates were higher among African American and Hispanic students as opposed to Caucasian students (Ripamonti 2018). In European countries, the rates of early school leavers are higher between disadvantaged and Roma students. In Slovakia, Hungary, and Romania in particular, the proportion of disadvantaged Roma students is high.

Table 1. These studies considered in this paper review psychological, behavioral, and demographical factors for early school leaving

Group	Subgroup	Variables
Psychological	Personality	<ul style="list-style-type: none"> - Low self-esteem (De Witte et al. 2013; Ekstrand 2015) - Low self-confidence (De Witte et al. 2013; Jugovic and Doolan 2013) - Self-defeat (De Witte et al. 2013)
	Depressive	<ul style="list-style-type: none"> - Mood disorder (Esch et al. 2014) - Suicidal disorder (Esch et al. 2014)
	Performance	<ul style="list-style-type: none"> - Cognitive performance (Foley et al. 2014) - Working memory performance (Fitzpatrick et al. 2015)
	Motivation	<ul style="list-style-type: none"> - Motivation and time preferences (Cabus and De Witte 2016) - Academic amotivation (Balkis 2018) - Academic achievement (Alivernini&Lucidi, 2011) - Motivation model of rural students (Wei et al.,2020) - Academic motivation (Ricard & Pelletier, 2016)

Behavioral	ADHD	<ul style="list-style-type: none"> - ADHD and learning differences (Zablotsky et al., 2020) - ADHD, high school drop-out (Sasser et al 2016) - ADHD and school failure (Fried et al. 2013)
	Substance use	<ul style="list-style-type: none"> - Smoking (Orpinas et al. 2016; Esch et al. 2014) - Cannabis (Stiby et al. 2015; Ehrenreich et al. 2015; Wang and Fredicks 2014; De Witte et al 2013; Ekstrand 2015; Esch et al. 2014)
	Truancy	<ul style="list-style-type: none"> - Truancy (Parr and Bonitz 2015; Cabus and De Witte 2015; De Witte and Csillag 2014)
Demographical	Gender	<ul style="list-style-type: none"> - Males and females (De Witte et al. 2013; Ekstrand 2015; Jugovic and Doolan 2013)
	Minority	<ul style="list-style-type: none"> - African American or Hispanic (Ripamonti 2018)

Family factors and family characteristics

The socioeconomic status (SES), most often measured by parents' employment, education and income (De Witte et al. 2013), is the most contested one among family factors. Many children live in low-income families. Because of this, these children are disadvantaged in their education. The economic background of the family is important in education. Mocetti (2012), Traag and van der Velden (2008) and Ripamonti (2018) in Italy and the Netherlands there is a significant connection between economic status and school dropout. Many disadvantaged students are particularly vulnerable to early school leaving. The home environment plays a big role in a child's life; Smyth and McCoy (2009) and Ripamonti (2018) suggested inadequate exposure to books and toys in the home as a possible mediating variable. This is especially true for children from minority groups. According

to Fejes (2005), a defining characteristic of gypsy families and poor subcultures is that the world of children is not spatially or psychologically separated from the world of adults.

Gabriella Pusztai (2009) focused on two-parent families with one child. The relationship between the child and the parents depends on the strength and stability of the parents' relationship. However, the absence of one parent can lead to a break in the social network, resulting in less social control and bigger loss. The single-parent family model is not necessarily bad, nor is security more vulnerable, but parental control is more insecure. According to European studies, the single-parent family model has a significant negative impact on the child's school performance. Parent-child communication plays an important role in preventing the child from leaving school early. Discussions about school can be important moments to avoid later school failures. One of Coleman's (1997) assumptions is that a family does not have to have only the financial and human capital to succeed in school. One of the positive effects of parent-child conversations is that the child receives advice, information, and motivation. It is highly probable that students, who regularly communicate or engage in common activities, such as sports, shopping, become less early school leavers. Rumberger found a correlation between parents' education and child school dropout (Rumberger, 1995). Pagani et al. (2008) used data from the longitudinal study and showed the three most important risk factors. The first factor constitutes a mother who did not finish school. The second factor is the single-parent family in early childhood. The third is school failure.

The family structure is most important for the child's well-being. Rebecca M. Ryan et al. (2015) investigated how changes in family structure relate to child behavior. According to De Witte et al. (2013), Bridgeland, Dilulio, & Morison (2006), children from single-parent households also seem to be more likely to drop out. So are children with stepparents (De Witte et al., 2013; Plank et al., 2005). The critical and most important point of this chapter is parent-children relationship. Fortin et al. think this is the most important factor, emerging from early school leaving. Farahati et al. (2003) reported the connection between school dropout and parent/parents' psychiatric problems.

Table 2. These studies considered in this paper review the family factors for early school leaving

Group	Subgroup	Variables
Family	Economic status	- Family economics status (Liu et al, 2020; De Witte et al. 2013; Ripamonti 2018; Zhang et al, 2020)
	Family structure	- Two parents' family (Molina 2020) - Single parent family (De Witte et al. 2013; Ekstrand 2015;) - Stepparents (De Witte et al. 2013; Sanner et al., 2019)
	Parent education	- Educational level (Rumberger 2020; Currie (2020); De Witte et al. 2013; Jugovic and Doolan 2013)
	Parent psychiatric problem	- Parent mental illness (Palm, 2018; Lee et al, 2013)

The school

Teachers play a fundamental role in the school system and dropout prevention (Ripamonti, 2018). Longobardi et al. (2016) especially the teacher's skills; as perceived by the students themselves, and their relationship with the teacher, may have a protective effect. Empirical studies have repeatedly proven that teachers play a key role in school dropout. Although the causes of school dropout are diverse, research findings show that there are some commonalities in the experiences of dropouts at school (Nairz-Wirth & Feldmann, 2016). Young people who dropped out of school have a negative relationship with teachers. Although school dropout is widely researched, there has not yet even been adequate relevant research between the relationship of student and teacher. Nairz-Wirth and Feldmann (2016) think three key factors contribute to a young person dropping out of school, namely personal, family, and school factors. Rumberger (1995), Darling-Hammond and Fickel (2006) have already pointed out that the relationship between teachers and students is one of the most important factors determining school dropout. Clearly, any description of the dropout phenomenon will involve a number of actors: the students themselves, teachers, principals, parents, peers, and other significant persons – all of whom can each have very different effects on students² (Nairz-Wirth & Feldmann, 2016; Davis & Dupper, 2004; Haley, 2006; Stearns & Glennie, 2006).

According to Rumberger (2004) and Rumberger and Thomas (2000), class composition in social terms has also been described as having to do with school dropout and reported as a risk factor independent of other demographic factors. The concept of segregated education is not only known among European countries. In fact, here are the most common, especially on ethical grounds. In Europe, the Roma population (also known as the Romani people or the Gypsies) is one of the largest and poorest ethnic minority (Hajdú et al., 2018). Most Roma people live in poverty, their employment level is low, and face other disadvantages. Many European countries apply segregated education to Roma students. This can be done in ways. The First way is spontaneous segregation. This is due to the dramatic decrease in the number of non-Roma children in school or a class, as parents of non-Roma children can transfer their children to other educational institutions. The second way, is intentional segregation. In this case, there is a special class for Roma students, completely excluding them for non-Roma students. Education in these classes is not as effective as in mixed classes. It follows that, the number of Roma students may be a large number of early school leavers. According to Hajdú et al. (2018), ethnic segregation in Hungarian schools is moderate on average, but high in other areas, and approximately half of non-Roma Hungarian children have no Roma peers in elementary school.

Table 3. These studies considered in this paper review the school factors for early school leaving

Group	Subgroup	Variables
School	Teachers	<ul style="list-style-type: none"> - Teachers-students relationship (Longobardi et al. 2016; Ripamonti 2018; Erna Nairz-Wirth& Klaus Feldmann 2016; Hughes et al, 2016; Jia et al. 2016) - Teachers attitude (Tukundane et al. 2015) - Number of students (De Witte et al. 2013) - Low qualification (De Witte et al. 2013; Ekstrand 2015)
	Class	- Class composition (Rumberger 2020; Ewe, 2019)
	Segregation	- Roma minority (Hajdú et al. 2018)

Learning and job opportunities

According to Jimerson et al. (2000) and Ripamonti (2018), Jimerson et al. (2000) confirmed that school failure has a relevant risk factor. Cognitive skills – including memory, motivation, self-concept, self-efficacy, leadership, and social and communication skills – play a role in formative and academic success.

Self-regulatory strategies and mastery motivation showed positive correlation in a study by Józsa and D. Molnár (2012). Accordingly, the students who often use planner, tracking strategies, achieve a better academic average (D Molnár 2014). According to Molnár, on one hand, self-regulated learning and school performance are positively related; their development can be a positive predictor of successful school life. On the other hand, applied learning strategies are decisive in primary and secondary school years. For that reason, self-regulatory strategies need to be developed for students, who are at risk of dropping out.

Another factor is the group of peers. According to Glaser (2009), Ripamonti (2018), Ewe (2019) the role of peers in the dynamics of dropout has been extensively investigated. Mahoney 2014 found that positive relation with friends may be a protective factor. In contrast, bullying and violent behavior are predictors to school dropout. The characteristics of friends and the network of friends of friends act as an independent risk factors for dropout (Carbonaro and Workman 2016).

De Witte et al. 2013 found that staying in school or leaving school can be considered as a rational choice, where students try to strike a balance between the opportunity cost and benefits of continued education. Cabus and De Witte 2013; Card and Lemieux 2001; De Witte et al. 2013 identified three major determinants. These are:

1. (young) Unemployment rate
2. The general economic condition/growth
3. The minimum wage

The first determinant is the unemployment rate, in different ways. Tumino and Taylor (2013), De Witte et al. (2013) found the discouraged student effect whereby high adult unemployment increases dropout rates. Unemployment among the current youth relates to higher probability of school leaving.

The generosity of the insurance system may decrease the menace of unemployment, however; in different European countries, the higher youth employment rate leads to lower rates of early school leavers (Clark 2011; De Witte et al. 2013).

Rumberger (2020) found that children who were poor at birth were three times more likely to leave school before graduation. Nevertheless, the parents whose unemployment may conduct to economic deprivation and childhood poverty which may be strong predictors of school dropout. De Witte et al. (2013) think that poor families lack the material, human, and cultural resources to support the education career of their children. According to Coleman (1997), there are the objective factors that influence educational attainment.

Coleman (1997) found economic, social and human capital. In his interpretation, economic capital is the economic situation, which means the financial situation of the family. This situation includes supporting the child's further education, purchasing teaching materials, and providing the material environment.

According to Montmarquette et al. (2007) and De Witte (2013), the higher minimum wage led to greater dropout, because young people who left school without a qualification were tempted by the high minimum wage. Pedace and Rohn (2011) concluded that higher minimum wages resulted in a higher unemployment risk for early school leavers.

Table 4. These studies considered in this paper review learning and job opportunities for early school leaving

Group	Subgroup	Variables
Learning	Scholastic performance	- School failure ; (Ripamonti 2018; Józsa and D. Molnár 2012; D. Molnár 2014)
	Group of peers	- Friends (Ripamonti 2018; Mahoney 2014; Carbonaro and Workman 2016)
Job opportunities	Job	- Working (De Witte et al. 2013; Cabus and De Witte 2013; Tumino and Taylor 2013; Clark 2011; Rumberger 2020 De Witte 2013)

Discussions and conclusions

School dropout and early school leaving still represents a problem of great concern, not only in terms of educational failure, but also for their social consequences (Rocque et al. 2018; Ripamonti 2018). According to González-Rodríguez et al. (2019), there is no cause or solution, and obtaining a global perspective of the problem is not an easy task. This study intended to focus on studying how variables influence a student leaving school.

As for the personal risk factor, there are researches showing that dropping out of school is more frequent among male students (De Witte et al. 2013; Jugovic and Doolan 2013; Ekstrand 2015). On the other hand, the cognitive skills such as memory are also important as a predictor for success at school (Foley et al. 2014; Fitzpatrick et al. 2015). Jimerson et al. (2000) Cabus and De Witte (2015) De Witte and Csillag (2014) have been reported as predictors of school dropout Low marks and failure, truancy are predictors. Furthermore, students with specific learning disorders and emotional difficulties are at risk of dropping out from school. Fried et al. (2016) and Vitaro et al. (2015) found that students with ADHD also frequently experience negative educational outcomes.

Glaser (2009) and Carbonaro and Workman (2016) found that peer groups play a particular role, which has been highlighted by several studies. Substance use has been related to school dropout, and substance use emerged as a significant predictor. Family background and parent educational success are a classical topic in research on school dropout. According to Ripamonti (2018), from the 1970s to the 2000s school dropout has been repeatedly associated with family socio-economics status. Finally teachers represent the second fundamental reference point in students' life. (Ripamonti 2018) Longobardi et al. (2016) found that scholars working have underlined the importance of the quality of teachers.

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