

Chapter 9

Children at risk: the effects of socio-economic background and family dissolution on children's school engagement, and the mediating role of family connections

Nele Havermans, Sarah Botterman, Koen Matthijs

INTRODUCTION

Although educational attainment levels have risen in Europe throughout the post-war period, inequalities that are attributed to mechanisms such as socio-economic background and family dissolution remain and have even increased the educational gap (European Trade Union Institute 2012). The socio-economic background is one of the most important determinants of educational disparities: children in deprived families are more likely to have worse educational outcomes and consequently have lower chances in life (McLanahan 2009). Family dissolution can be considered an additional mechanism that increases the risk of transmitting social inequalities from parents to children. Within the past few decades, there has been a profound shift in family structures in Europe (Kalmijn 2007). Research has already demonstrated the heightened risk for children with divorced parents of lower educational outcomes (Amato 2001).

Flanders has one of the most unequal educational systems in Europe (OECD 2010). Flemish children of a low socio-economic background are less successful in reading and mathematics and they also feel less engaged in school (De Meyer et al. 2005). There is growing evidence that Flemish children with divorced parents are also less likely to attain a degree of higher education and to be engaged in school (Havermans et al. 2013a; 2013b). These types of inequalities have also been found in other European countries (Gorard and Smith 2004). European policy makers consider equal educational opportunities as one of the main instruments for promoting social inclusion and reducing youth unemployment and early school leaving (e.g. European Commission 2009; 2010).

Obstacles to social inclusion are interconnected and situated at different levels. They can exist at the institutional (discrimination, lack of infrastructure), family (socio-economic background, family structure and dynamics), community (prejudice, marginalisation), or individual level (withdrawal). In this study, the focus is on obstacles at the family level. Given the negative effects of family dissolution and a low socio-economic background on educational outcomes, the question is whether these relationships are mediated by worsened connections between family members and ill-functioning family dynamics.

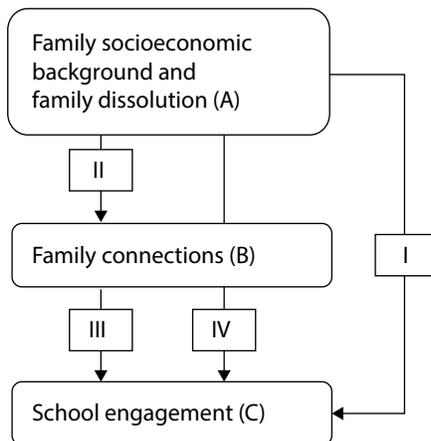
This research question is approached from the perspectives of youth research, practice and policy (“the magic triangle” of the youth field). In the first section of this article, we summarise the main findings of a study on family influences on children’s educational outcomes with a special focus on non-cognitive educational outcomes. Results of analyses on a representative sample of Flemish secondary school pupils are presented. Next, we discuss how youth work and policy deal with the link between family disconnections and social inclusion.

THE INFLUENCE OF FAMILY CHARACTERISTICS ON CHILDREN’S EDUCATIONAL OUTCOMES IN FLANDERS (BELGIUM)

In this quantitative study, we focus on the effects of socio-economic family background and family dissolution on family connections and on school engagement, all investigated from the perspective of the child. We refer to the respondents as “children”, because this is their status within the family context (the main focus of the analyses). The sample used in the analyses, however, consists of adolescents between 11 and 21 years old. So, although we refer to the respondents as children in the following paragraphs, the results of this study touch the family and school life of youth in Flanders. Given the applied nature of this journal, we briefly discuss previous literature on this topic and the main conclusions of the analyses. The main conclusions are linked to youth policy and practice in a transnational manner.

Presentation of the conceptual and analytical model

Figure 1. Conceptual and analytical model



The conceptual and analytical model is presented in Figure 1. Conceptually, we focus on family characteristics of family socio-economic background and family dissolution (A), family connections (B) and school engagement of children (C). Analytically, we focus on the relationships between family characteristics and school engagement (I), family characteristics and family connections (II), family connections and school engagement (III), and family characteristics and school engagement, mediated through family connections (IV).

Conceptual model

Some children are believed to be more at risk than others when it comes to their educational chances. We consider two family background characteristics that put children at risk of negative (educational) outcomes: the socio-economic family background and family dissolution (A). These structural family characteristics strongly influence the development of children. These contextual risk factors have negative effects on a number of children's outcomes; among others, educational outcomes, socio-emotional well-being and health outcomes. We focus on the effects on family connections (B) and school engagement (C).

We define family connections as the effectiveness and quality of contact between family members. According to the family system perspective, there are three subsystems within a family: the partner, the parental and the sibling subsystem. Family connections not only refer to the relationships between parents and children, but also to the relationships between parents and between siblings. We focus on the marital and parent-child subsystems. The quality of these relationships has an important impact on child functioning and development (Hakvoort et al. 2010). Furthermore, the effectiveness of relationships between parents and their children can be looked at via the parenting style. This is the balance between the supervision parents have over their children and the autonomy parents give to their children. The authoritative parenting style is generally cited as the most beneficial style for child development. This style combines high levels of autonomy with high levels of supervision (Baumrind 1966).

We study school engagement, a non-cognitive educational outcome. Non-cognitive educational outcomes are not part of cognitive educational outcomes that measure knowledge in formal examinations and tests. They relate to attitudinal and personal qualities and behaviour at school. There has been a growing recognition of the importance of these non-cognitive outcomes for both current and future outcomes, such as employability (Johnson et al. 2001). The concept of school engagement does not only cover behavioural aspects, such as school attendance, homework and participation in class, but also more emotional aspects, such as interest in school and motivation to study (Dee and West 2011). School engagement is strongly linked to school dropout, entrance into post-secondary education and labour market participation in adult life (Finn 2006).

Analytical framework

First, we examine the effects of socio-economic family background and family dissolution on school engagement (I). Children within financially healthy families are expected to display higher levels of school engagement, as their financially secured family provides them with more resources to perform well in school (Brown 2010). Conversely, family economic hardship causes stress that can decrease children's

school engagement (Mistry et al. 2009). The educational level of parents strongly influences the cognitive environment created within the family (Raviva et al. 2004). Higher educated parents tend to stimulate their children more to do well at school, as they generally understand the potential gains of education better than lower-educated parents (Astone and McLanahan 1991). Also, they are more able to help their children with schoolwork as they possess more intellectual capital (Conger and Donnellan 2007). Family dissolution is related to lower levels of well-being and engagement. The stress surrounding the divorce process can decrease children's concentration and motivation at school (Amato 2001).

Second, we analyse the effects of socio-economic family background and family dissolution on family connections (II). The dynamics in family relationships have an important impact on the functioning and development of children (Hakvoort et al. 2010). Families with a low socio-economic position tend to have more disconnected family relations. High conflict relationships occur more in couples with financial problems or with a low educational level (Conger et al. 2010; Van den Troost et al. 2006). Family dissolution and divorce do not often end the existing conflicts between parents. Divorced couples are still at risk of conflict with their ex-partner, because they still need to make decisions together regarding, among others, the custody arrangement, alimony and child rearing in general (Dronkers 1999; Musick and Meier 2010). Parent-child relationships are also affected by family dissolution and socio-economic family characteristics. Economic deprivation and divorce are strongly related to less engaged and ineffective parenting styles (Kiernan and Huerta 2008; Martinez and Forgatch 2002) and worse parent-child relationships (Conger et al. 2010; Kalmijn 2012). Conversely, children of higher educated parents often have a better relationship with their parents than children of low-educated parents (Chen and Kaplan 2001).

Third, we study the effect of family connections on school engagement (III). First of all, parents' involvement in children's educational life can increase children's motivation and participation at school (Gonzalez-DeHass et al. 2005; Kearney 2008). An authoritative parenting style that combines being responsive with being demanding is also related to better educational outcomes. Parents with a more authoritative parenting style guide their children more, and their supervision and control leads to more engagement at school (Baumrind 1966; Steinberg et al. 1992). Parental conflict decreases children's concentration and motivation at school, because children have more stress when their parents argue at home (Dronkers 1999; Hakvoort et al. 2010).

Finally, we analyse the indirect effects of the socio-economic family background and family dissolution on school engagement, through family connections (IV). As the direct effects of socio-economic family background and family dissolution on both family connections and school engagement are assumed to be negative, the indirect effects of these inequality transmitters are also expected to be negative. Family disconnections are expected to (partially) explain the negative effect of weak family characteristics on school engagement.

Results

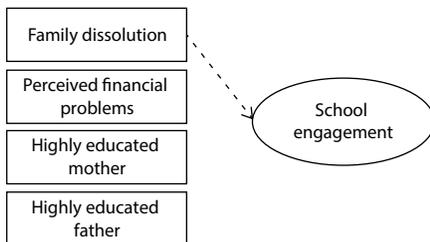
The conceptual model is tested on the Leuven Adolescents and Family Studies dataset (LAFS, www.soc.kuleuven.be/lago). The data were collected between 2008

and 2011 by the Family and Population Studies research team of the University of Leuven (www.soc.kuleuven.be/fapos). Comprising 7 035 pupils within 49 secondary schools, this dataset covers more than 1% of the total school population in Flanders. The distribution of gender, year and track strongly resembles the total school population (Vanassche et al. 2012). The respondents in the sample are between the ages of 11 and 21, with an average age of 15. In the analyses, we control for gender, age and Belgian nationality. Significant results ($p < .05$) are reported in the figures with dashed (negative effects) and full (positive effects) arrows. Information on the operationalisation of the variables, analytical techniques and results are presented in the Appendix.

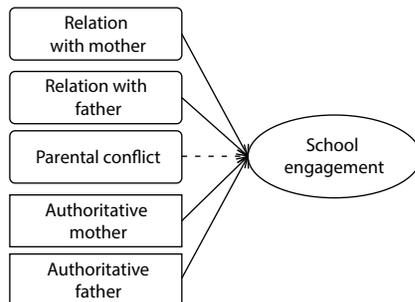
The results of this study show that school engagement is not influenced by the indicators of socio-economic family background when we control for family connections (see Figure 2a). Only family dissolution significantly decreases children’s school engagement. In Figure 2b, all family connection indicators affect school engagement. Children with a good relationship with their mother and their father also have a high level of school engagement. Being exposed to parental conflict decreases children’s school engagement. An authoritative parenting style of the mother and father has positive effects on school engagement.

Figure 2. Direct paths to school engagement

2a. Path I: Direct effects of socio-economic family background and family dissolution on school engagement (controlled for family connections and control variables)



2b. Path III: Direct effects of family connections on school engagement (controlled for socio-economic family background, family dissolution and control variables)



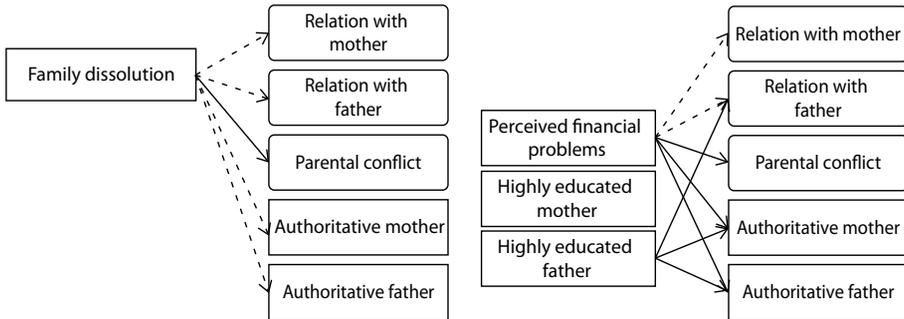
In Figure 3 every significant effect of the socio-economic family background and family dissolution on family connections is presented. With regard to the socio-economic family background, perceived financial problems particularly affect negatively the relationships with the mother and father and increase the incidence of parental conflict. Also the authoritative parenting style is less likely to be employed by parents who face financial problems at home. The educational level of the mother and father has fewer effects on family connections. Children of highly educated fathers report a significantly better relationship with their father. Highly educated fathers also adopt more often an authoritative parenting style and their (ex-)partner (i.e. mother of the child) will also employ more often an authoritative parenting style. The educational

level of mothers does not influence any of the family connections indicators. Finally, family dissolution affects every family connection indicator. It decreases the quality of the relationships between children and their parents and increases the prevalence of parental conflict. Parenting style is also affected by parental divorce, as divorced parents will more often employ a non-authoritative parenting style.

Figure 3. Path II: Direct effects on family connections

3a. Direct effects of family dissolution on family connections

3b. Direct effects of socio-economic family background on family connections



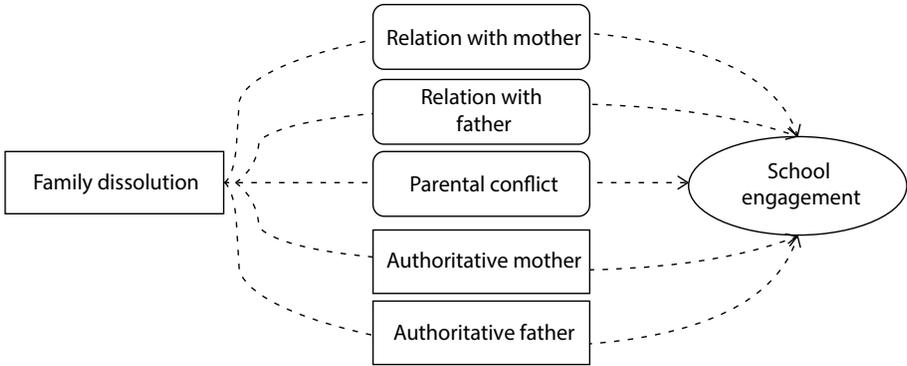
The previous results show that: 1) socio-economic family background and family dissolution influence family connections; 2) controlling for family connections, there is no effect of family background on children’s school engagement; and 3) controlling for family background, family connections are significantly related to children’s school engagement.

Next, it is calculated whether the effect of family background is indirect and mediated through family connections. In Figure 4a, the indirect effects of family dissolution on school engagement are presented. In addition to its direct negative effect, parental divorce has a significant negative indirect effect on children’s school engagement. This effect is mediated by every family connections indicator. In figures 4b and 4c the indirect effects of the socio-economic family background indicators are presented. Perceived financial problems at home have a significant negative indirect effect, which is mediated by all family connections indicators. The educational level of the father has a positive indirect effect on children’s school engagement. This indirect effect runs through a better relationship that higher educated fathers have with their children and also through an authoritative parenting style of both parents.

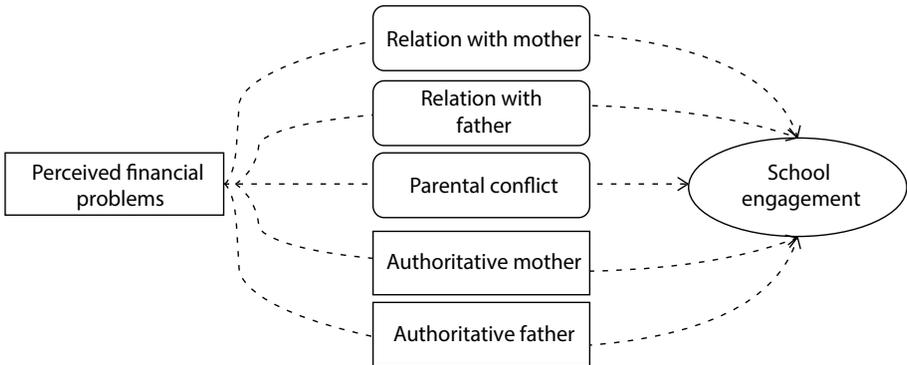
To summarise, the influence of family background (measured by socio-economic background and family dissolution) on children’s school engagement can largely be explained by disconnections at the family level. As a consequence, policy and practice aiming at the social inclusion of youth should take the family into account. Not only do the socio-economic background and family structure bear importance for children’s educational outcomes but, most importantly, relations between parents, and between parents and children, hold a key for improving the educational chances of children from a disadvantaged background. These findings are related to youth policy and practice at a transnational level in the following paragraphs.

Figure 4. Path IV: Indirect effects of socio-economic family background and family dissolution on school engagement

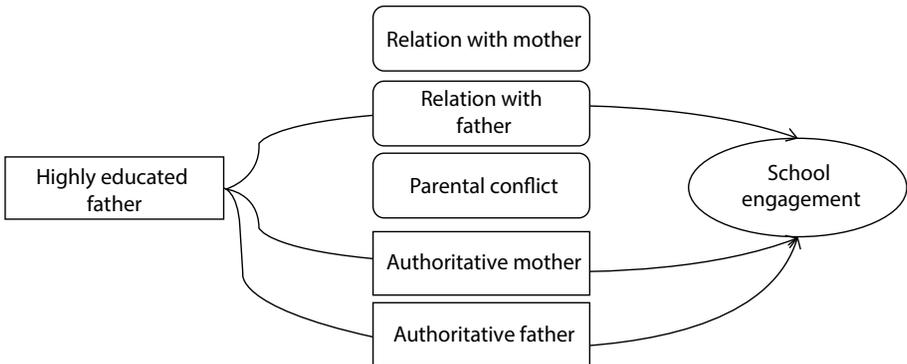
4a. Indirect effects of family dissolution on school engagement



4b. Indirect effects of perceived financial problems on school engagement



4c. Indirect effects of parental educational level on school engagement



Two limitations of this study should be mentioned. First of all, one should be aware that the variables are only measured among children, and not their parents or teachers. This consequently means that the results on family connections and school engagement only refer to the perspective of the child. Taking on a parent (or teacher) perspective can potentially challenge the results of this study. This is a valuable direction for future research. A second limitation is related to the first one. Given that the children were questioned and not the parents, it was impossible to include a more precise measure of family income than the perceived financial problems measure. A different measure of the financial resources in the family (such as family income) may possibly lead to a different view on the direct and indirect effects of the financial situation in the family.

The Flemish context: generalisability of the results

The results are specific to the context of Flanders (Belgium). Flanders is a prosperous region in Europe. It has an employment rate of 72% (EU average: 69%) and 45% of 30 to 34-year-olds in Flanders have finished tertiary education (EU average: 36%). According to PISA data, levels of educational inequality in Flanders are high, whereas levels of school engagement are low (OECD 2010). Furthermore, the divorce rate in Belgium is one of the highest in Europe (Eurostat 2010). With regard to youth policy, youth work and social inclusion of Flemish youth, more information can be found on this webpage: <http://pjp-eu.coe.int/web/youth-partnership/belgium-flemish-community->.

There is very little European research that compares determinants of school engagement between countries. Willms (2003) compares school belonging and participation levels across countries in the PISA 2000 study. His report shows that the impact of family background (measured by socio-economic status and family dissolution) on school engagement is significant for almost all countries. Parent involvement, which is closely related to the parent-child relationship (Simpkins et al. 2006) and parenting style (Lee et al. 2006), influence educational outcomes significantly in almost all OECD countries (Borgonovi and Montt 2012). Although these are indications that the results in the Flemish study are not country-specific and may be transferred to other European countries (and regions), more cross-national research is necessary to get a good grasp of the generalisability of the results of the Flemish study.

YOUTH WORK AS AN INSTRUMENT FOR SOCIAL INCLUSION: BLIND SPOT ON THE FAMILY?

The EU Youth Strategy (2010-2018) explicitly mentions the role of youth work initiatives to prevent social exclusion of youth. The informal learning in youth work initiatives can have a beneficial impact on children's school performance (Fredricks and Eccles 2006) and the social inclusion of low-skilled youngsters (Verschelden et al. 2011). Participating in youth work initiatives can help this latter group to acquire new skills or become motivated to return to school (European Commission 2010). A number of initiatives have been undertaken at the European level to promote transnational co-operation and exchange, such as the Youth in Action programme and the European Youth Pact (European Commission 2010).

If there is one message to take away from the Flemish case study presented above, it is that family connections explain partly the negative educational outcomes of children from a low socio-economic background or from a dissolved family. Traditionally, family connections have been a blind spot for youth workers. Although some youth work initiatives have been oriented at children from a disadvantaged background, these generally tend to avoid the dynamics within these families (Robinson et al. 2011).³⁵ Based on some very limited research, it can be claimed that participation in youth work initiatives can improve the relationships between children and parents (Larson et al. 2006) or help children deal with parental conflict or divorce (Pedro-Carroll 2005). There is need for more research on this topic to ascertain conditions and dimensions of youth work that can affect family connections in a positive manner. The European level plays a central role in streamlining research on this topic and bringing together examples of good practice in order to further explore the relationships between youth practice and family connections.

YOUTH POLICY: GROWING CO-OPERATION WITH FAMILY POLICY?

Policies that promote child well-being and educational equality should be directed at alleviating the influence of risk-inducing family variables. In order to reach this goal, a close co-operation between youth and family policies is necessary. Within this respect, the common policy of family affairs (Council of Europe 2006) is noteworthy to mention. In this policy, the crucial role of the family for child development is stressed. Member states are motivated to recognise the importance of parental responsibilities and the need to provide parents with enough support to help them fulfil their responsibilities. Within this common framework, national (and regional) governments are stimulated to support initiatives directed at improving parent–child interactions by, among other things, giving parenting support and improving the work–family life balance for parents.

Based on the results of the Flemish case study, protecting the family environment and supporting parents can be useful tools to combat social exclusion of youth and the intergenerational transmission of poverty. A comprehensive approach against the influence of unfavourable family characteristics on children’s educational outcomes is recommended. This can consist of a combination of financial transfers with the provision of parental support to struggling families. The combination of these two policy initiatives has already proved successful (Shulruf et al. 2009) and may help governments to reach families with a low socio-economic background.

With respect to the initiatives that have been undertaken at the transnational level, socio-political and socio-cultural differences continue to exist between countries regarding family support. First of all, there are differences in the way the state intervenes in family life. In Scandinavian countries such as Norway and Sweden, parental support is compulsory and is usually situated in universal (early childhood) services. Other countries, such as Belgium (Flanders) and the Netherlands, recognise the

35. This discussion does not touch the topic of youth counselling within which attention is given to helping children deal with problematic family dynamics.

importance of making parenting support easily accessible, but these services are not compulsory. In general, there is a tension between the private matter of child rearing and the ideas of how children should be raised in the best way possible (Hopman, De Winter and Koops 2012). There is a need for cross-country research on the efficacy and efficiency of parenting support aimed at identifying good practices. Also with respect to transferring financial means to families in poverty, there are some differences between countries. These differences are, among other things, situated in the division of responsibilities between family and state and the manner in which financial means (such as taxes or income) are transferred (Saraceno and Keck 2010). The different contexts in Europe provide both a challenge (bringing together different perspectives) and an opportunity (learning from each other) in the creation of a transnational network of family support.

REFERENCES

- Amato P. (2001), "Children of divorce in the 1990s: An update of the Amato and Keith (1991) meta-analysis", *Journal of Family Psychology* Vol. 15 No. 3, pp. 355-370.
- Astone N. and McLanahan S. S. (1991), "Family structure, parental practices and high school completion", *American Sociological Review* Vol. 56 No. 3, pp. 309-320.
- Baumrind D. (1966), "Effects of authoritative parental control on child behavior", *Child Development* Vol. 37 No. 4, pp. 887-907.
- Borgonovi F. and Montt G. (2012), "Parental Involvement in Selected PISA Countries and Economies", *OECD Education Working Papers No. 73*, OECD, Paris.
- Brown T. A. (2006), *Confirmatory Factor Analysis for Applied Research*, Guilford Press, London.
- Brown S. L. (2010), "Marriage and child well-being: Research and policy perspectives", *Journal of Marriage and the Family* Vol. 72 No. 5, pp. 1059-1077.
- Brutsaert H. (1993), *School, Gezin en Welbevinden: Zesdeklassers en hun Sociale Omgeving*, Garant, Leuven/Apeldoorn.
- Chen Z. and Kaplan H. (2001), "Intergenerational transmission of constructive parenting", *Journal of Marriage and Family* Vol. 63 No. 1, pp. 17-31.
- Conger R. D., Conger K. J. and Martin M. J. (2010), "Socioeconomic status, family processes, and individual development", *Journal of Marriage and Family* Vol. 72 No. 3, pp. 685-704.
- Conger R. D. and Donnellan M. B. (2007), "An interactionist perspective on the socio-economic context of human development", *Annual Review of Psychology* Vol. 58, pp.175-199.
- Council of Europe (2006), Recommendation Rec(2006)19 of the Committee of Ministers to member states on policy to support positive parenting, available online from: <https://wcd.coe.int/ViewDoc.jsp?id=1073507>.
- Dee T. S. and West M. R. (2011), "The non-cognitive returns to class size", *Educational Evaluation and Policy Analysis* Vol. 33 No. 1, pp. 23-46.

De Meyer I., Pauly J. and Van de Poele L. (2005), *Learning for Tomorrow's Problems in Flanders*. Universiteit Gent, Gent.

Dronkers J. (1999), "The effects of parental conflicts and divorce on the well-being of pupils in Dutch secondary education", *European Sociological Review* Vol. 15 No. 2, pp. 195-212.

European Commission (2009), "An EU Strategy for Youth – Investing and Empowering", European Commission, Brussels.

European Commission (2010), "Council resolution on a renewed Framework for European Cooperation in the Youth Field", European Commission, Brussels.

European Trade Union Institute (2012), "Benchmarking Working Europe 2012", European Trade Union Institute, Brussels.

Eurostat (2010) Population Figures, available online from: <http://epp.Eurostat.ec.europa.eu/portal/page/portal/population/introduction>.

Finn J. D. (2006), *The Adult Lives of At-Risk Students: The Roles of Attainment and Engagement in High School*, (NCES 2006-328), U.S. Department of Education, National Center for Education Statistics, Washington DC.

Fredricks J. A. and Eccles J. S. (2005), "Developmental benefits of extracurricular involvement: Do peer characteristics mediate the link between activities and youth outcomes?", *Journal of Youth and Adolescence*, Vol. 34 No. 6, pp. 507-520.

Furman W. and Buhrmester D. (1985), "Children's perceptions of the personal relationships in their social networks", *Developmental Psychology*, Vol. 21, pp. 1016-1022.

Gonzalez-DeHass A. R., Willems P. P. and Holbein M. F. D. (2005), "Examining the relationship between parental involvement and student motivation", *Educational Psychology Review* Vol. 17 No. 2, pp. 99-123.

Gorard S. and Smith E. (2004), "An international comparison of equity in education systems", *Comparative Education* Vol. 40 No. 1, pp. 15-28.

Hakvoort E. M. et al. (2010), "Family relationships and the psychosocial adjustment of school-aged children in intact families", *The Journal of Genetic Psychology* Vol. 171 No. 2, pp. 182-201.

Havermans N. et al. (2013a), "Gezinstrajecten en schoolloopbanen van kinderen", in Corijn M. and Van Peer C. (eds), *Gezinstransities*. Studiedienst van de Vlaamse Regering, Brussels.

Havermans N., Vanassche S. and Matthijs K. (2013b), "De invloed van een echtscheiding op de schoolloopbaan van kinderen", *Relaties en Nieuwe Gezinnen* (forthcoming).

Hopman M., De Winter M. and Koops W. (2012), "The hidden curriculum of youth policy: A Dutch example", *Youth and Society* (forthcoming).

Johnson M., Crosnoe R. and Elder G. H. J. (2001), "Students' attachment and academic engagement: The role of race and ethnicity", *Sociology of Education* Vol. 74 No. 4, pp. 318-340.

- Kalmijn M. (2007), "Explaining cross-national differences in marriage, cohabitation, and divorce in Europe, 1990-2000", *Population Studies* Vol. 61 No. 3, pp. 243-263.
- Kalmijn M. (2012), "Long-term effects of divorce on parent-child relationships: Within-family comparisons of fathers and mothers", *European Sociological Review* (forthcoming).
- Kearney C. A. (2008), "School absenteeism and school refusal behavior in youth: A contemporary review", *Clinical Psychology Review* Vol. 28 No. 3, pp. 451-471.
- Keller J. and McDade K. (2000), "Attitudes of low-income parents toward seeking help with parenting: implications for practice", *Child Welfare* Vol. 79 No. 3, pp. 285-312.
- Kiernan K. E. and Huerta M. C. (2008), "Economic deprivation, maternal depression, parenting and children's cognitive and emotional development in early childhood", *The British Journal of Sociology* Vol. 59 No. 4, pp. 783-806.
- Larson R. W. et al. (2007), "Participation in youth programmes as a catalyst for negotiation of family autonomy with connection", *Journal of Youth and Adolescence* Vol. 36, pp. 31-45.
- Martinez C. R. J. and Forgatch M. S. (2002), "Adjusting to change: Linking family structure transitions with parenting and boys' adjustment", *Journal of Family Psychology* Vol. 16 No. 2, pp. 107-117.
- McLanahan S. (2009), "Fragile Families and the Reproduction of Poverty", *The Annals of the American Academy of Political and Social Science* Vol. 621 No. 1, pp. 111-131.
- Mistry R. et al. (2009), "Family economic stress and academic well-being among Chinese-American youth: The influence of adolescents' perceptions of economic strain", *Journal of Family Psychology* Vol. 23 No. 3, pp. 279-290.
- Musick K. and Meier A. (2010), "Are both parents always better than one? Parental conflict and young adult well-being", *Social Science Research* Vol. 39 No. 5, pp. 814-830.
- OECD (2010), *PISA 2009 Results: Overcoming Social Background – Equity in Learning Opportunities and Outcomes (Volume II)*, <http://dx.doi.org/10.1787/9789264091504-en>.
- Pedro-Carroll J. L. (2005), "Fostering resilience in the aftermath of divorce. The role of evidence-based programmes for children", *Family Court Review* Vol. 43, pp. 52-64.
- Raviva T., Kessenich M. and Morrison F. J. (2004), "Mediational model of the association between socioeconomic status and three-year-old language abilities: The role of parenting factors", *Early Childhood Research Quarterly* Vol. 19 No. 4, pp. 528-547.
- Robinson E., Power L. and Allan D. (2011), "What works with adolescents? Family connections and involvement in interventions for adolescent problem behaviours", *Family Matters* No. 88, pp. 57-64.
- Saraceno C. and Keck W. (2010), "Can we identify intergenerational policy regimes in Europe?", *European Societies* Vol. 12 No. 5, pp. 675-696.
- Shulruf B., O'Loughlin C. and Tolley H. (2009), "Parenting education and support policies and their consequences in selected OECD countries", *Children and Youth Services Review* Vol. 31 No. 5, pp. 526-532.

Simpkins S. D. et al. (2006), "Mother-child relationship as a moderator of the relation between family educational involvement and child achievement", *Parenting: Science and Practice* Vol. 6, pp. 49-57.

Steinberg L. et al. (1992), "Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed", *Child Development* Vol. 63 No. 5, pp. 1266-1281.

Vanassche S. et al. (2012), *Methodologische Documenten Leuvens Adolescenten- en Gezinnenonderzoek. Versie 2.0*, Centre for Sociological Research, University of Leuven, Leuven.

Van den Troost A. et al. (2006), "Effects of spousal economic and cultural factors on Dutch marital satisfaction", *Journal of Family and Economic Issues* Vol. 27 No. 2, pp. 235-262.

Verschelden G. et al. (2009), *The history of youth work in Europe and its relevance for youth policy today*, Council of Europe Publishing, Strasbourg.

Willms J. D. (2003), *Student engagement at school: A sense of belonging and participation. Results from PISA 2000*, OECD, Paris.

APPENDIX

A1. Operationalisation of the variables

School engagement is measured by 12 factors (Brutsaert 1991). Children answer whether they agree or disagree regarding attitudes and behaviour in school, giving scores between 0 (totally disagree) and 4 (totally agree). The sum scale of these 12 factors runs from 0 to 48 (mean = 23.22; SD = 7.94; Cronbach's alpha = 0.86).

The socio-economic family background is measured by the educational level of the parents and the financial situation at home. The educational level of the mother and father is measured by two dummy variables, each indicating whether the parent has a degree of tertiary education (score 1) or not (score 0). Forty-three percent of the children have two parents with a degree of tertiary education, 32% have two parents with no degree of tertiary education. The perceived financial situation at home is measured by a dummy variable. Children are asked how often they feel their parents have a hard time getting by financially. Almost 81% of the children indicated that there were never or seldom financial problems at home (score 0). Nineteen percent of the children indicated that there were sometimes or always financial problems at home (score 1). Family dissolution is included as a dummy variable, with score 0 relating to an intact family and score 1 pointing to a non-intact family that has experienced a divorce. Twenty-seven percent of the children are living in a non-intact family.

The family connections are measured by the child-parent relationships, the parental conflict and the authoritative parenting styles of parents. Note that these measures are based entirely on survey responses of children and are therefore to be interpreted

with caution. The relationships between children and their mother and father are measured by nine factors (Furhman and Burmester 1985). The total sum scores run from 0 to 36. On average, children have a slightly better relationship with their mother (mean = 22.21; SD = 6.88; Cronbach's alpha = 0.90) than with their father (mean = 19.94; SD = 7.62; Cronbach's alpha = 0.91). Parental conflict is measured by three factors. The total sum scale runs from 0 to 12 (mean = 3.26; SD = 2.56; Cronbach's alpha = 0.80). The authoritative parenting styles of mother and father are calculated using five factors that measure responsiveness and five factors that measure autonomy. Parents who score more than the average on both the responsiveness and autonomy scale have an authoritative parenting style. A dummy variable of authoritative parenting style shows that more than 40% of the mothers and 36% of the fathers have an authoritative parenting style.

The control variables that are included are gender (1 = boy, 0 = girl), age (mean = 15.23; SD = 3.41) and nationality (1 = Belgian, 0 = non-Belgian). 46% of the children are boys and 7% of children do not have the Belgian nationality.

A2. Methods

Path analyses are conducted, in which causal relations between variables are specified. The indirect effects and standard errors are calculated using the delta method. The analyses are performed in Mplus 5.21 and Full Information Maximum Likelihood (FIML) estimations are produced to deal with missing values.

A3. Results

Table A1. Direct effects on school engagement (Path I and III)

	School engagement
Perceived financial problems	0.009
Highly educated mother	0.022
Highly educated father	-0.014
Family dissolution	-0.027*
Relation with mother	0.199***
Relation with father	0.076***
Parental conflict	-0.036*
Authoritative mother	0.065**
Authoritative father	0.054**
Boy	-0.098***
Age	-0.054***
Belgian	-0.056***
N	

Note: Entries are standardised estimates (β).
Significance: * p <.05; ** p <.01; *** p <.001.

Table A2. Direct effects on family connections (path II)

	Relation with mother	Relation with father	Parental conflict	Authoritative mother	Authoritative father
Perceived financial problems	-0.075***	-0.134***	0.248***	-0.062***	-0.061***
Highly educated mother	-0.004	0.006	0.000	0.014	0.017
Highly educated father	0.014	0.036*	-0.030	0.067***	0.069***
Family dissolution	-0.043**	-0.210***	0.111***	-0.047**	-0.099***
N					

Note: Entries are standardised estimates (β).

Significance: * $p < .05$; ** $p < .01$; *** $p < .001$.

Table A3. Indirect effects on school engagement (path IV)

	School engagement
Family dissolution via relation with mother	-0.009**
Family dissolution via relation with father	-0.016***
Family dissolution via parental conflict	-0.004*
Family dissolution via authoritative mother	-0.003*
Family dissolution via authoritative father	-0.005*
Total indirect effect	-0.037***
Perceived financial problems via relation with mother	-0.015***
Perceived financial problems via relation with father	-0.010***
Perceived financial problems via parental conflict	-0.009*
Perceived financial problems via authoritative mother	-0.004*
Perceived financial problems via authoritative father	-0.003*
Total indirect effect	-0.041***
Highly educated mother via relation with mother	-0.001
Highly educated mother via relation with father	0.000
Highly educated mother via parental conflict	0.000
Highly educated mother via authoritative mother	0.001
Highly educated mother via authoritative father	0.001
Total indirect effect	0.001
Highly educated father via relation with mother	0.003

	School engagement
Highly educated father via relation with father	0.003*
Highly educated father via parental conflict	0.001
Highly educated father via authoritative mother	0.004*
Highly educated father via authoritative father	0.004*
Total indirect effect	0.015**

Note: Entries are standardised estimates (β).
Significance: * p <.05; ** p <.01; *** p <.001.