

Studsrød, I., Bru, E. (2009) The role of perceived parental socialization practices in school adjustment among Norwegian upper secondary school students. *British Journal of Educational Psychology*, 79(3), pp. 529–546

Link to published article: DOI:10.1348/000709908X381771 (Access to content may be restricted)



UiS Brage http://brage.bibsys.no/uis/

This version is made available in accordance with publisher policies. It is the author's last version of the article after peer-review, usually referred to as post-print. Please cite only the published version using the reference above.



The role of perceived parental socialization practices in school adjustment among Norwegian upper secondary school students

Ingunn Studsrød and Edvin Bru

Background. Lack of adjustment or school failure is a concern to educators, educational and school psychologists as well as parents, but few studies have focused on school adjustment during late adolescence. Moreover, studies have yet to explore associations between parenting and school adjustment among upper secondary school students.

Aim. The primary objective of this study is to explore the relative and unique influence of parental support, behavioural control and psychological control (overprotection and autonomy granting) in school adjustment among upper secondary school students.

Sample. The sample consisted of 564 students (15–18 years of age) in vocational and general educational courses from one upper secondary school in western Norway.

Method. The study was conducted as a survey. All data were based on adolescent reports, except for absence data, which were provided by the school.

Results. The results showed that perceived parental practices accounted for moderate, but statistically significant amounts of variance in different aspects of school adjustment.

Conclusions. The findings indicate that perceived parental socialization practices are only moderately associated with school adjustment among upper secondary school students. This probably reflects the fact that the influence of specific parenting practices declines as children and young adolescents mature into late adolescent students.

Lack of adjustment or school failure is a concern to educators, educational and school psychologists, and parents (Anderson, Hamilton, & Hattie, 2004). Internationally, findings have revealed that many adolescent students experience adjustment problems, e.g. truancy, alienation, lack of motivation (Otis, Grouzet, & Pelletier, 2005; Roeser & Eccles, 1998), and dropout (Markussen, Sandberg, Lødding, & Frøseth, 2008; Rumberger & Thomas, 2000; Statistics Norway, 2008), all of which are related to a range of short and long term problems (Attwood & Croll, 2006; Ekstrom, Goertz, Pollack, & Rock, 1986; Finn, 1989; Goodenow & Grady, 1993; Hidi & Harackiewicz, 2000; LeCompte & Dworkin, 1991; Skinner & Belmont, 1993; Wagstaff, Combs, & Jarvis, 2000). Consequently, poor motivation and attendance as well as lack of interest and feelings of not 'fitting in' at school are critical issues (Attwood & Croll, 2006; Finn, 1989; Goodenow & Grady, 1993; Hidi & Harackiewicz, 2000; Wagstaff, Combs, & Jarvis, 2000).

Many explanations have been proposed to account for the school functioning of young children and adolescents, and educators often look to the home in order to deepen their understanding. In their literature review of parenting styles, Glasgow and fellow workers (Glasgow, Dornbusch, Lisa, Steinberg, & Ritter, 1997) argued that psychological, sociological, and educational studies have demonstrated that the influence of specific parenting practices does not decline as children mature into adolescence, but continues to shape their development, especially in the area of educational achievement.

This study seeks to expand current knowledge by disaggregating the parenting style model and examining three parenting behaviours simultaneous as unique predictors of school adjustment. Several authors suggest that parental support, behavioural control, and psychological control (overprotection and autonomy-granting) are critical for several aspects of youth functioning (e.g. Barber, 1997a; Barber, 1997b; Barber & Olsen, 1997). A limited body of research has investigated all three parenting behaviours as unique predictors of adolescent development (Galambos, Barker, & Almeida, 2003). Most previous research has aggregated parenting behaviour into parenting styles (e.g. Glasgow et al., 1997; Steinberg, Darling, Fletcher, Brown, & Dornbusch, 1995; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). However, although the typological approach has been fruitful, it has certain weaknesses, for instance it is not possible to examine the individual contribution of each socialization practices. Besides, in some cases 50 to 70% of the parents have been excluded because they were not deemed to have a 'pure' parenting style (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Glasgow et al., 1997; Kim & Rohner, 2002; Lamborn, Mounts, Steinberg, & Dornbusch, 1991). Thus researchers have found it useful to disaggregate the parenting style model in order to determine the individual contribution of support, behavioural control. and psychological control in child and adolescent development (e.g. Barber, 1997; Barber & Olsen, 1997) and more research employing this approach is needed (Barber & Olsen, 2004).

This study also seeks to reduce the research gap by investigating several aspects of late adolescents' school adjustment. Few studies have focused on school adjustment and motivation during late-adolescence (Gilman & Anderman, 2006). Most of the previous studies that have examined all three parenting behaviours as unique predictors of school outcomes have been conducted among younger adolescents (Barber & Olsen, 1997; Eccles, Early, Fraser, Belansky, & McCarthy, 1997; Forehand & Nousiainen, 1993; Galambos et al., 2003). Those including late adolescents have focused on one or a few measures of school functioning, most often academic achievement (Bean, Barber, & Crane, 2006; Bean, Bush, McKenry, & Wilson, 2003; Herman, Dornbusch, Herron, & Herting, 1997). Not many researchers have investigated how late adolescent students' perceptions of and behaviour at school are associated with specific parenting practices. The lack of studies of older adolescents makes it unclear as to whether the relationship with parents remains important for their perception of the school environment, as well as for other school-related issues. Late adolescence differs from earlier developmental stages, among other things being characterized by less closeness and coherence between parents and children, diminished parental influence, dependency on peers instead of parents, as well as an increased tendency to perceive that parents may be in some way deficient in meeting the adolescent's needs (Allen & Land, 1999; Fuligni, Barber, Eccles, & Clements, 2001; Steinberg, Darling, Fletcher, Brown, & Dornbusch, 1995). Moreover, upper secondary school offers unique challenges (Gilman & Anderman, 2006) and during this period students make important and far-reaching decisions. Thus it is important to identify the factors that promote school adjustment during these years (Gregory & Weinstein, 2004).

This study aims to help bridge the research gap by exploring the relative and unique influence of parental support, behavioural control and psychological control (overprotection and autonomy granting) on several critical aspects of late adolescents' school adjustment. School adjustment is defined as a concept that includes: (a) changes in motivational orientation towards further schooling, (b) alienation from school, (c) intention to quit school, (d) truancy at school, and (e) absence from class, all of which seem to be of great significance in late adolescence.

Parental socialization practices and school adjustment

In this study, we explore adolescents' perceptions of parents as socializing agents. Parental support is communication of interest to the individual and enjoyment of the individual by parents (Connell, 1990). According to attachment theory (Bowlby, 1984), parental support develops a sense of security in children that facilitates independence from the family and exploration of new social environments. Supportive relationships are suggested to promote feelings of affective ties, relatedness and belongingness in students and play an important role in the transmission and internalization of values, thus reduces the risk of norm-breaking behaviour (Ryan & Powelson, 1991). Previous research has shown that adolescents who report relatively close relations with their parents score higher than their peers on measures of responsible independence, psychosocial well-being and behavioural competence in school (Steinberg, 1990). academic expectations (Herman et al., 1997), lower likelihood of younger students academic alienation (Eccles et al., 1997) and absence (Corville-Smith, Ryan, Adams, & Dalicandro, 1998). In this study, we also include a measure of parents' interest in their children's schoolwork. Such interest is understood as an aspect of parental support, since it concerns communication of well-intentioned interest in the child's learning. Parental interest in schoolwork has bee found to foster motivational orientation (Marchant, Paulson, & Rothlisberg, 2001) and positive attitudes towards school (Trusty, 1998). It has also been related to a lower risk of truancy (Epstein & Sheldon, 2002; Wichstrøm, 1993) and drop-out (Rumberger, Ghatak, Poulos, Ritter, & Dornbusch, 1990). However, there have also been reports of no associations between parent-child conversations about school and drop-out as well as suggestions that this influence diminishes during the secondary school period (Fan & Chen, 2001; Luyten, Bosker, Dekkers, & Derks, 2003). Few, if any, studies have addressed these issues among adolescents, and since late adolescents may have decreased their reliance on parents and increased their individualization (Allen & Land, 1999; Grotevant, 1998), it would be valuable to gain knowledge about the associations between parental support and school adjustment among this age group.

Parental monitoring is the second parental dimension of interest. Monitoring or behavioural control is usually understood as adequate behavioural regulation and measured in terms of supervision, monitoring, keeping an eye on things, rule-setting and other forms of behavioural control (Barber, 1997). Clear and consistent expectations and limit-setting are believed to foster internalization of rules and the development of self-efficacy (Flammer, 1995). Without adequate regulation that originates in their social environment, young people do not learn to self-regulate and consequently tend to be impulsive, prone to risk taking, and otherwise more likely to engage in various forms of antisocial behaviour (Barber, 1997). However, empirical research on parental monitoring as predictor of school outcomes has been more or less contradictory. A number of studies have revealed that low parental monitoring are associated with externalizing problems (Barber, Olsen, & Shagle, 1994; Eccles et al., 1997; Galambos et al., 2003; Gregory & Weinstein, 2004; Hill et al., 2004). Others have found that parental monitoring do not significantly predict school absence (Corville-Smith et al., 1998) or academic alienation (Eccles et al., 1997). Moreover, parental monitoring as predictor are found to be different among different ethnic groups (Bean et al., 2003).

One way to advance the understanding of the processes of parental control is to make the distinction between psychological control and behavioural control (Barber, 2002). *Parental psychological control*, or *overprotection*, concerns socialization processes that intrude the child's development of his/her own sense of identity, efficacy, and worth (Barber, 1997). Over-management may therefore promote rather than prevent adjustment problems (Conger, Conger, & Scaramella, 1997). In the present study overprotection is defined as exaggerated contact, over-involvement and obstruction of independent behaviour. Psychological control has been consistently, and positively associated with increased levels of internalizing problems (Barber & Harmon, 2002; Barber *et al.*, 1994; Gray & Steinberg, 1999). Evidence indicates also that parental psychological control has a negative impact on school related outcomes, such as motivation and academic achievement (Amatea & Sherrard, 1995; Ginsburg & Bronstein, 1993; Ng, Kenney-Benson, & Pomerantz, 2004).

Psychological autonomy-granting is reflected in parental encouragement of adolescents' individual expressions and decision-making. Parents who practice a high degree of autonomy-granting allow their child to make choices about activities and behaviour and encourage the development of independence (Morris et al., 2002). Autonomy-granting is therefore likely to foster more autonomous behaviour. Autonomysupportive parenting has been associated with adjustment factors such as less academic alienation (Eccles et al., 1997), less acting-out and greater classroom competence (Grolnick, 1989), although these studies equate the absence of psychological control with autonomy-granting. While parents may not overprotect their child, it does not mean that they necessarily encourage or foster autonomy. However, most empirical research has not used separate scales for autonomy-granting and psychological control (Barber, 2002; Silk, Morris, Kanaya, & Steinberg, 2003). There is actually a paucity of empirical findings showing associations between autonomy-granting and school adjustment. A research review of similar constructs, however, suggests that autonomy-granting may be related to positive development but unrelated to adjustment problems (Silk et al., 2003). Moreover, recent research on autonomy supportive teacher styles reveals a clear and strong influence on students' subsequent motivation and engagement (Reeve & Jang, 2006; Reeve, Jang, Carrell, Jeon, & Barch, 2004). Finally, findings have revealed that both parental psychological control and autonomy granting are only weakly associated with externalizing problems such as delinquency (Barber et al., 1994; Silk et al., 2003).

Parents are believed to be important socializing agents in the early years of our lives, and results from previous studies indicate that parental socialization practices influence children's school adjustment. Although children become more independent from their parents during adolescence, it is possible that parental socialization practices can also influence school adjustment also among students in late adolescence. However, few studies have addressed this issue thus it is unclear as to whether the relationship with parents remains important for their adjustment with school.

Methods

Sample

The questionnaire was administered to 748 students in one upper secondary school in western Norway. The response rate was 75.4%. The sample comprised 272 boys, 288 girls in addition to four students who did not indicate their gender, giving a total of 564 students. The students were aged between 15 and 18 and in their 11th to 13th year of schooling. They were engaged in different vocational and general educational courses.

Procedures

All data in this study were based on adolescent reports, except for attendance data, which were provided by the school and measured at the end of the school year. The questionnaire was given to the students three months after the start of the 2004/2005 school year. It was administered by teachers and completed during a normal 45-min classroom period with the students' teacher present. To ensure that reading difficulties did not impede a student's ability to complete the questionnaire, the instructions and individual items were read aloud by the teacher when requested, while students read along silently. To prevent students influencing each other's responses, the questionnaires were as far as possible administered at the same time for each class. However, some exceptions had to be made in order to maximise class participation.

Approval for the studie was obtained from the Data Inspectorate of Norway. Each home was informed about the study to give parents the opportunity to stop their child from participating (if under the age of 16) if they so wished. Informed consent was obtained from all participating students and they were assured anonymity. The students entered a class code and a student code (not their names) on the questionnaire. The anonymity procedures were as follows: Each class and student was given a code number by the school. The code lists were available to the school administration, but not the researchers. The school administration did not have access to the data files. The student code number made it possible to link absence data to each student.

Missing data were handled by giving a missing item the mean score for the other items in each subscale completed by the individual. Percentages of missing data were low, on average 1.8% for included items and less than 4% for any single item. Twelve respondents with more than 30% of missing data for one or more of the scales were excluded from the sample.

The selected statistical tools were Pearson product-moment-correlations, Spearman correlations, factor analysis, regression analysis, multinominal logistic regression analysis and multivariate GLM analysis. All statistical analyses were conducted using SPSS (Norusis, 2002). GLM analysis was chosen because it allows analyses of several dependent variables simultaneously and thus give the estimation of multivariate associations between the independent and all the dependent variables. The GLM yields partial Eta as the measure of effect size.

Measures

School adjustment

The improved motivation for continued education scale consisted of five items and was constructed for this particular study in order to measure perceptions of whether school experiences in the present year have a positive influence on students' motivation to continue their schooling. Responses were coded so that high scores indicated a high level of positive motivation. Three questionnaire items were used to measure school alienation, which reflected the students' perception of whether their school experiences in the present year has a negative impact of their desire to continue their schooling. Students also replied to three questions regarding their intention to guit school. All the above-mentioned scales had a four-step scoring format with response alternatives: 'Disagree strongly', 'disagree a little', 'agree a little' and 'agree very much', and all items were coded so that the more alienation and intention to guit reported by the student, the higher the score. The dimensionality of items on school adjustment was tested by factor analyses, implementing principal axis factoring, oblique rotation and a minimum eigenvalue of 1.00 (see Table 1). The factor analyses yielded a pattern of factors in accordance with the intended concepts. All factor-based scales that were computed yielded satisfactory coefficients of reliability. Truancy was assessed by one question regarding how often the student played truant. The response alternatives were: 'never', 'seldom', 'sometimes' and 'often'. Class absence during the year (similar to class skipping) referred to the number of single lessons students that the student had missed in addition to whole days. The prevalence of whole day absence was also recorded, but

not included in this study, since single-class absence was believed to be a better indicator of school adjustment.

	Factor 1	Factor 2	Factor 3
Improved motivation for continued education			
During this school year I have become more motivated in terms of school	0.94		
This school year has increased my understanding of the importance of education	0.83		
This school year has motivated me to learn more	0.82		
This school year has stimulated my desire for more education	0.77		
This school year has improved my confidence in believing that I can do well in school	0.77		
School alienation			
This school year made me realize that I don't fit in at school.		0.90	
This school year made me want to discontinue my education		0.88	
This school year made me realize that school is not for me Intentions to quit school		0.86	
If I could, I would have dropped out of school			0.92
I would rather work than go to school			0.77
I am considering quitting school			0.72
Eigenvalues	5.41	1.59	1.08
% variance explained (Total variance explained 57.5%)	49.1%	14.4%	9.8%
Cronbach's alphas	.90	.89	.73

Table 1. Results from the factor analysis of items assessing school adjustment and motivational orientation, as well as Cronbach's alphas for factor-based scales

Perceived parental socialization

In the questionnaire, all questions regarding relationships with parents referred to parents or guardians (later labelled parents), not mothers or fathers. If the adolescent lived with only one parent, they were to take into consideration the one they spent the most of their time with. Presumably some students lived with an adult who was not their legal parent. They were told to decide which person(s) should be considered their parent(s). All items regarding parental socialization practices had a four-step scoring format and the response alternatives were: 'disagree strongly', 'disagree a little', 'agree a little' and 'agree very much'. All our data on parental practices were derived from adolescents' self- reports and measured perceived parental socialization.

In order to assess *parental monitoring* we included four items from a scale developed by Alsaker, Dundas and Olweus (1991). A Norwegian short version (Pedersen, 1992) of the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979) was employed to assess parental overprotection. In order to assess *parental interest in schoolwork*, we adjusted an existing scale (Majoribanks, 1993). The *parental autonomy-granting* scale and *parental support* scale were developed specifically for the present study. The dimensionality of items related to perceived parental socialization was tested by a factor analysis that included varimax factoring with Kaiser Normalization (see Table 2). The varimax approach was chosen in order to avoid problems with multicollinearity in the multivariate GLM analyses. The factor analyses yielded a pattern of factors that was in accordance with the intended concepts.

Control and grouping variables

Gender and general educational course of study were included as control as well as grouping variables. Males were given the value 1 and females the value 2. A general educational course was given the value 1 and a vocational course the value 2. The *family financial situation measure* was based on the student's perception of his/her family economic situation in relation to that of other Norwegian families. The adolescents indicated the degree of agreement with the items using a four-point scale, scored in such a way that higher scores indicated a better family economic situation. *Grade* in upper secondary school was included as the final control variable.

Results

Table 3 provides descriptive information on all dependent variables. Most students agreed (strongly or a little), while nearly 40% disagreed, with the statement that their school experiences in this year had improved their motivation in terms of continued education. Likewise, most students reported a disagreement (strongly or a little) with the perception of alienation from school. While the majority of the students reported no intention of quit school, nearly 20% indicated such intentions and a higher number reported truancy. Of the latter, approximately 30% reported that it rarely occurred, while 3.6% reported truancy on a weekly basis. Reported absence from lessons followed a similar pattern. Most students reported incidences of absence from class. About 15% of the study population were absent from a single class to the extent that it comprised more than 5% of the total number of lessons, in addition to whole-day absence(s).

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Parental monitoring					
My parents know fairly well whom	0.77				
I am with in my spare time					
My parents know most of those with	0.75				
whom I usually go around					
My parents usually know where I am	0.53				
and what I do during my spare time					
My parents like most of those I am	0.59				
with during my spare time					
Parental support					
I mean a great deal to my parents		0.72			
I can help my parents, be supportive and useful		0.64			
I can count on my parents when I need help	0.34	0.61 0.68			
I feel attached to my parents Parental autonomy-granting	0.54	0.00			
They let me decide things by myself			0.63		
They approve of me making my own decisions			0.60		
They trust me to be responsible			0.59		
for my schoolwork			0.00		
They give me the opportunity to			0.53		
control the schoolwork myself			0.00		
Parental overprotection					
They overprotect me				0.77	
They tend to baby me				0.73	
They try to control everything I do				0.45	
Parental interest in schoolwork					
My parents often praise me for my schoolwork					0.47
My parents are interested in my schoolwork					0.66
My parents often help me with my schoolwork					0.51
Eigenvalues	5.66	2.16	1.35	1.19	1.07
% variances explained (Total variance explained 63.4%)	31.41%	11.99%	7.47%	6.59%	5.94%

Table 2. Results from varimax factor analysis of items assessing parental socialization

Bivariate correlations were also computed and revealed mainly non-significant associations between perceived parental socialization variables and control variables. Exceptions were significant correlations between family financial situation and parental interest in schoolwork (r_{14} 0.24, p_{-} .01), parental support (r_{14} 0.14, p_{-} .01) and parental autonomy-granting (r_{14} 0.11, $p_{-}.05$). Parental autonomy-granting was also correlated with gender (r_{14} 0.12, $p_{-}.01$), with higher parental autonomy-granting scores among female students.

The results of the analyses of bivariate and multivariate associations between independent and all dependent variables are presented in Table 4. Multivariate analyses revealed that independent variables accounted for the most variance in improved motivation for continued education scores, followed by truancy, school alienation, intention to guit school and absence. When adjusting for the effect of the control

variables, parental socialization variables accounted for a significantly, but modestly amount (between 7.8 and 3.4%) of variance in the dependent variables. The results indicated that the model was poorest at explaining class absence.

All parental socialization variables showed significant multivariate associations with school adjustment, although relatively modest. Among the parental variables included, parental support was the single most important in relation to school adjustment. High parental support scores were associated with high scores for improved motivation for continued education and low scores for school alienation, intention to quit school and truancy. Parental monitoring was significantly and positively related to improved motivation for continued education and negatively related to intention to quit school and truancy. Parental interest in schoolwork was associated with high scores on improved motivation for continued education and low scores were significantly related to high scores on school alienation, intention to quit school, truancy and, as the only socialization variable, high parental overprotection was also related to class absence. Finally, parental autonomy-granting was negatively related to school alienation and truancy.

The findings also revealed a significant interaction effect between support and monitoring in relation to scores for improved motivation for continued education, school alienation and intention to quit school. These interactions reflected the fact that parental monitoring was positively related to improved motivation for continued education and negatively associated with school alienation and intention to quit school, but only among those students who reported relatively high parental support.

	Disagree strongly	Disagree a little	Agree a little	Strongly agree	Μ	SD	Scoring range
Improved motivation for continued education	10.5%	28.4%	43.6%	17.5%	2.66	0.73	1–4
School alienation	56.2%	28.3%	10.3%	5.2%	1.72	0.76	1–4
Intention to quit school	63%	19.2%	13.2%	4.6%	1.70	0.77	1–4
	Never	Seldom	Sometimes	Weekly			
Truancy	41.8%	33.6%	21%	3.6%	0.86	0.868	0–3
	None	0 - 5%	5 – 10%	.10%			
Class absence	4.9%	80.2%	12.6%	2.2%	29.66	31.29	0–1140

Table 3. Descriptive information related to the dependent variables

Disagree strongly: Index score in the low 1/4 of scoring range. Disagree a little: Index score in the middle low 1/4 of scoring range. Agree a little: Index score in the middle high 1/4 of scoring range. Strongly agree: Index in the high 1/4 of scoring range.

	Multivariate association	Improved motivation for continued education		School alienation		Intention to quit school		Truancy		Absence lessons	
		r	Partial eta	r	Partial eta	r	Partial eta	r	Partial eta	r	Partial eta
Gender	0.08	0.02	0.02	20.07	20.05	20.05	20.03	0.04	0.05	0.02	0.03
Course of study	0.32**	0.28**	0.23**	20.02	0.04	0.06*	0.11*	20.13	20.08	20.05	0.03
Year of schooling	0.30**	20.27**	20.24**	0.15**	0.17**	0.08**	0.12**	0.21**	0.20**	0.05	0.05
Family financial situation	0.08	0.08	0.04	20.07	20.01	20.10	20.06	20.11	20.05	20.09	20.06
Parental support	0.21**	0.15**	0.17**	20.15**	20.16**	20.14**	20.14**	20.16**	20.11**	20.12	20.07
Parental interest in schoolwork	0.17**	0.18**	0.15**	20.13*	20.10*	20.07	20.03	20.16*	20.10*	20.10	20.06
Parental monitoring	0.18**	0.10*	0.10*	20.07	20.07	20.14**	20.15**	20.14**	20.12**	20.07	20.04
Parental autonomy- granting	0.16*	0.04	0.01	20.12*	20.09*	20.08	20.04	20.16**	20.14**	20.09	20.06
Parental overprotection	0.17**	20.06	20.05	0.13**	0.13**	0.15**	0.14**	0.09*	0.09*	0.10*	0.10*
Parental support x parental monitoring	0.24**	0.14**	0.21**	20.08**	20.14**	20.08**	20.15**	0.05	0.01	0.07	0.04
R ² of all independent variables			0.214**		0.107**		0.102**		0.136**		0.047**
Unique R ² for parental socialization variables			0.077**		0.074**		0.078**		0.072**		0.034**

Table 4. Results from the multivariate GLM, as well as the Pearson product moment correlation for associations between control variables, parental socialization variables and school adjustment factors (*p , .05, ** p , .01).

The control variables had relatively strong associations with the school-adjustment measures. Students in vocational courses had a tendency to report higher scores on improved motivation for continued education and lower on intention to quit school. Years of schooling was significantly related to four out of five outcome measures. Students in higher grades had a tendency to score low on improved motivation for continued education, but higher scores on school alienation, intention to quit school and truancy. Gender and family financial situation were not significantly related to the outcome variables.

The measurement of truancy was at the ordinal level and the inclusion of such a variable could create erroneous results in parametric analyses. Therefore parametric analyses for this variable were followed by non-parametric correlations (Spearman correlations) and multinominal logistic regression. Results from these analyses corresponded well with results from parametric analyses. Thus, there were no indications that the measurement level of truancy significantly affected the results.

Discussion

The purpose of the study was to explore how students' perceptions of different core dimensions of parental socialization practices were associated with school adjustment among Norwegian upper secondary school students. This study contributes to the knowledge of late adolescents' school adjustment in at least two ways. First, in contrast to previous research where there have been few attempts to disaggregate parenting styles (Barber, 1997; Barber & Olsen, 2004; Galambos et al., 2003), this study isolated and examined the associations between each individual dimension and adolescent school adjustment and the extent to which all the dimensions of perceived parenting explained variance in adolescent school adjustment. This approach makes is possible to include all students in the analysis, unlike the previous typological approach that often excluded a large number of cases from the analyses, an operationalization that may limit the external validity of the studies (e.g. Dornbusch et al., 1987; Glasgow et al., 1997; Kim & Rohner, 2002; Lamborn et al., 1991). Secondly, in contrast to previous research that mainly examined academic achievement in upper secondary school, the scope of the present study was broadened to cover several critical dimensions that underlie or define the educational progress.

The results showed that perceived parental practices accounted for significant amounts of variance in different aspects of school adjustment. However the effect size was rather low. The square of r ranged from 7.8% to 3.4%. The results therefore revealed that, among this sample, core dimensions of parental socialization practice were only moderately related to motivation, alienation, truancy, class absences and intention to quit school. Thus the findings could indicate that parental practices do not well explain students' upper secondary school adjustment.

Before discussing the findings related to parental socialization, it appears appropriate to highlight the relatively strong association between course of study and improved motivation for continued education (see Table 4), indicating that students in vocational courses had a higher tendency to report that their school experiences had a positive influence on their motivation to continue their schooling. Despite the fact that the Norwegian upper secondary school system offers flexible pathways, general educational programmes are aimed at preparing the student for college and university and as such can be perceived as more academic challenging than vocational courses. The results support previous findings indicating that students pursuing more traditional high school college preparatory programmes report higher levels of intellectual pressure and challenge, feel less relaxed and have lower levels of motivation compared to vocational classes (Schneider, Csikszentmihalyi, & Knauth, 1995).

As mentioned above, the results imply that parental practices do not well explain students' upper secondary school adjustment. The modest association could mean that the individual characteristics of students e.g. attitudes of students, like perceptions of ability to complete a task and the importance attributed to task success (Bandura, 1995; Eccles, Wigfield, & Schiefele, 1998) may be less manipulative by parents than in earlier years. There are few studies that focus on the associations between parental practices and school adjustment during late-adolescence, but previous research on similar topics appears to indicate that the effects of parental practices are to some extent age-specific. For instance, research reviews examining the relationship between parental involvement and student motivation in samples of elementary to upper secondary school pupils indicate that the effect sizes are somewhat higher for the former (grade 3; Gonzalez-DeHass, Willems, & Holbein, 2005). Besides during adolescence peer relationships take on unique significance (Berndt, 1996; Goldstein, Davis-Kean, & Eccles, 2005). Thus it is reasonable to assume that peer relationships, e.g. perceived peer group norms, would have a relatively stronger link than parental practices with the outcome variables under study. Moreover, the demands on the pupils tend to increase with age, thus in terms of educational progress, teachers and the classroom learning environment may become increasingly important to students. However further research is needed to explore these relationships.

Of the parental socialization variables included, parental support revealed the relatively strongest association with school adjustment. Findings indicated a moderate but statistically significant tendency for students who perceived high parental support to have improved their motivation for continued education during the school year. Moreover, the results also suggest that high parental support is moderately associated with less school alienation, intention to quit school and truancy. Despite the fact that the associations were rather modest, the findings are in accordance with previous results concerning responsible independence, psychosocial well-being and behavioural competence in school, academic expectations, academic alienation and absence (Corville-Smith *et al.*, 1998; Eccles *et al.*, 1997; Herman *et al.*, 1997; Steinberg, 1990).

In addition, our findings revealed a positive relation between parental interest in schoolwork and improved motivation for continued education, as well as a negative association between parental interest and school alienation and truancy, both of which are in line with previous research (Epstein & Sheldon, 2002; Marchant *et al.*, 2001; Trusty, 1998). Despite the fact that the associations were rather modest and may imply that the importance of parental interest in mid and late adolescence is less than in younger years (Luyten *et al.*, 2003), it is likely that the value of schooling and education is conveyed to the offspring through active school-related, parent-child discussions and tutorials.

High parental monitoring scores were moderately related to high improved motivation for continued education scores, as well as low scores on intention to quit school and truancy. Although the associations were relatively modest, the results agree with earlier research indicating that, on the whole, parents' firm discipline and limit-setting behaviour are important in preventing externalizing problems (Eccles et al., 1997; Galambos *et al.*, 2003; Gregory & Weinstein, 2004; Hill *et al.*, 2004).

The findings indicate that the association between parental monitoring and improved motivation for continued education, school alienation and intention to guit school may, to a minor extent, depend on the amount of perceived parental support. Parental monitoring was positively related to improved motivation for continued education, only among students who reported high parental support. The interaction effect is in accordance with the findings of studies in which a typological approach to parenting is applied, revealing that students who rate their parents as authoritative (high levels of support and monitoring) score higher than their peers who rate their parents as authoritarian (low levels of support and high levels of monitoring) in a variety of school related variables (e.g. Dornbusch et al., 1987; Ginsburg & Bronstein, 1993; Glasgow et al., 1997). Parental-style research assumes that the impact of any one parental practice depends, in part, on the arrangements of the others (Glasgow et al., 1997). The interaction effect may imply that parental support provides an interpersonal foundation upon which behavioural monitoring has its unique and more specific motivational impact (Connell, 1990). Parental support makes the child more receptive to parental monitoring (Steinberg, 2001). The associations between parental monitoring and school adjustment therefore may therefore reflect different directions and impacts, depending on the quality of parental support. All these factors could explain the interaction effects on improved motivation for continued education, school alienation and intention to guit school.

The results showed a weak tendency for students with high overprotection scores to more frequently report an intention to quit school, school alienation, truancy and class absence, which is in accordance with previous research showing that psychological control is related to developmental and adjustment problems (Barber, 2002; Conger *et al.*, 1997). Parental overprotection may lead to perceptions of inefficacy in school situations, which could cause students to withdraw from school. High parental autonomy-granting scores were moderately related to low scores in the area of school alienation and truancy, which is to a certain degree in accordance with previous research showing that autonomy-granting is associated with positive development during adolescence (Silk *et al.*, 2003).

Few studies of adolescent outcomes have made the distinction between overprotection and autonomy-granting (Barber, Bean, & Erickson, 2002). Our results indicate that students who experience parental intrusiveness tend to experience school-adjustment problems, whereas those who experience parental autonomy-granting tend to experience school in a more positive way.

Although our findings revealed no interaction effects of behavioural control and autonomy-granting in relation to school adjustment, which is in line with other studies (Slicker, 1998), it is likely that as children pass through adolescence, the provision of an adequate structure must be balanced by autonomy-supporting behaviour. According to previous results, the democratic style of parenting may emerge naturally when adolescents rate their parents highly on both behavioural monitoring and parental support (Slicker, 1998).

Some methodological limitations of the study must be acknowledged. All our data on parental practices were derived from adolescent self-reports. There may be arguments regarding the relative merits of using adolescent- versus parent-reported information to study family socialization practices. However, previous research has revealed that adolescents' achievements are more related to their perceptions of parenting than parents' perceptions (Paulson, 1994). The decision to measure socialization perceptions was based on previous research suggesting that these are equally important as actual behaviour (Steinberg, Lamborn, Dormbusch, & Darling, 1992). Researchers in the field of educational psychology have recognized the significance of individual students' constructions of meanings as important mediators between the actual school context and these students' school related feelings and actions (Roeser & Eccles, 1998; Schunk, 1992). Ryan and Grolnick (1986) hold that it is rather the functional meaning of the environment per se that is of concern in the investigation of motivation and behaviour. Moreover, as the data were collected at a single point in time, we cannot infer that perceived parental socialization proceeded, and thus may be causally related to school adjustment. Finally, although the data were collected from one school only, betweenschool differences in terms of student performance tend to be low in the Scandinavian countries (Marks, 2006). Nevertheless, generalizations should be made with caution.

In summary, students' perceptions of parental socialization practices accounted for significant levels of variance in all school adjustment variables. The highest amount of variance was found in the intention to quit school scores (7.8%), followed by improved motivation for continued education (7.7%), school alienation (7.4%), truancy (7.2%) and class absence (3.4%). Thus parental socialization variables accounted for rather moderate levels of variance in school adjustment variables. The late adolescent period is a time of transformation in parent-child relations, and the adolescents in the present study may have reduced their reliance on parents and increased their individualization. In view of the methodological limitations, studies with a more robust design are needed in order to further contribute to knowledge in this area.

References

- Allen, J. P., & Land, D. (1999). Attachment in adolescence. In J. Cassidy & P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (pp. 319–336). New York, London: The Guilford Press.
- Alsaker, F.D., Dundas, I., & Olweus, D. (1991). A growth curve approach to the study of parental relations and depression in adolescence. Seattle, USA.
- Amatea, E. S., & Sherrard, P. A. D. (1995). Inquiring into children's social worlds: a choice of lenses. In B. A. Ryan, G. R. Adams, T. P. Gullotta, R. P. Weissberg, & R. L. Hampton (Eds.), *The family-school connection theory, research and practice* (Vol. 2, pp. 29–74). Thousand Oaks, London, New Dehli: Sage Publications, Inc.
- Anderson, A., Hamilton, R. J., & Hattie, J. (2004). Classroom climate and motivated behaviour in secondary schools. *Learning Environments Research*, 7, 211–225.
- Attwood, G., & Croll, P. (2006). Truancy in secondary school pupils: Prevalence, trajectories and pupil perspectives. *Research Papers in Education*, 21(4), 467–484.
- Bandura, A. (1995). Self-efficacy in changing societies. Cambridge: Cambridge University Press.
- Barber, B. K. (1997). Introduction: Adolescent socialization in context-the role of connection, regulation, and autonomy in the family. *Journal of Adolescent Research*, 12(1), 5–11.
- Barber, B. K. (2002). *Intrusive parenting: How psychological control affects children and adolescents*. Washington, DC: American Psychological Association.
- Barber, B. K., Bean, R. L., & Erickson, L. D. (2002). Expanding the study and understanding of psychological control. In B. K. Barber (Ed.), *Intrusive parenting: How psychological control* affects children and adolescents (pp. 263–291). Washington, DC: American Psychological Association.
- Barber, B. K., & Harmon, E. L. (2002). Violating the self: Parental psychological control of children and adolescents. In B. K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents.* Washington, DC: American Psychological Association.
- Barber, B. K., & Olsen, J. A. (1997). Socialization in context: Connection, regulation and autonomy in the family, school and neighborhood, and with peers. *Journal of Adolescent Research*, 12(2), 287–315.
- Barber, B. K., & Olsen, J. A. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research*, 19(1), 3–30.
- Barber, B. K., Olsen, J. E., & Shagle, S. C. (1994). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. *Child Development*, 65, 1120–1136.
- Bean, R. A., Barber, B. K., & Crane, D. R. (2006). Parental support, behavioral control and psychological control among African American youth: The relationships to academic grades, delinquency, and depression. *Journal of Family Issues*, 27(10), 1335–1355.
- Bean, R. A., Bush, K. R., McKenry, P. C., & Wilson, S. M. (2003). The impact of parental support, behavioral control and psychological control on the academic achievement and self-esteem of African American and European American adolescents. *Journal of Adolescent Research*, 18(5), 523–541.
- Berndt, T. J. (1996). Transitions in friendship and friends' influence. In J. A. Graber, J. Brooks-Gunn, & A. C. Petersen (Eds.), *Transitions through adolescence interpersonal domains and context* (pp. 57–85). Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Bowlby, J. (1984). Attachment (2nd ed.). Harmondsworth: Penguin.
- Conger, K. J., Conger, R. D., & Scaramella, L. V. (1997). Parents, siblings, psychological control, and adolescent adjustment. *Journal of Adolescent Research*, 12(1), 113–138.
- Connell, J. P. (1990). Context, self and action: A motivational analysis of self-system processes across the life span. In D. Cicchetti & M. Beeghly (Eds.), *The self in transition: Infancy to childhood* (pp. 61–97). Chicago, London: University of Chicago Press.
- Corville-Smith, J., Ryan, B. A., Adams, G. R., & Dalicandro, T. (1998). Distinguishing absentee students from regular attenders: The combined influence of personal, family, and school factors. *Journal of Youth and Adolescence*, 27(5), 629–640.

- Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. *Child Development*, 58(5), 1244–1257.
- Eccles, J. S., Early, D., Fraser, K., Belansky, E., & McCarthy, K. (1997). The relation of connection, regulation and support for autonomy to adolescents' functioning. *Journal of Adolescent Research*, 12(2), 263–286.
- Eccles, J. S., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (5th ed., Vol. 3, pp. 1017–1097). New York, Chichester, Weinheim, Brisbane, Singapore, Toronto: John Wiley & Sons, Inc.
- Epstein, J. L., & Sheldon, S. B. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research*, 95(5), 308–318.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A metaanalysis. *Educational Psychology Review*, 13(1), 1–22.

Finn, J. D. (1989). Withdrawing from school. Review of Educational Research, 59(2), 117-142.

- Flammer, A. (1995). Developmental analysis of control beliefs. In A. Bandura (Ed.), Self- efficacy in changing societies (pp. 69–114). Cambridge: Cambridge University Press.
- Forehand, R., & Nousiainen, S. (1993). Maternal and paternal parenting: Critical dimensions in adolescent functioning. *Journal of Family Psychology*, 7(2), 213–221.
- Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development*, 74(2), 578–594.
- Gilman, R., & Anderman, E. M. (2006). The relationship between relative levels of motivation and intrapersonal, interpersonal, and academic functioning among older adolescents. *Journal of School Psychology*, 44(5), 375–391.
- Ginsburg, G. S., & Bronstein, P. (1993). Family factors related to children's intrinsic/extrinsic motivational orientation and academic performance. *Child Development*, 64(5), 1461–1474.
- Glasgow, K. L., Dornbusch, S. M., Lisa, T., Steinberg, L., & Ritter, P. L. (1997). Parenting styles, adolescents' attributions, and educational outcomes in nine heterogeneous high schools. *Child Development*, 68(3), 507–529.
- Goldstein, S. E., Davis-Kean, P. E., & Eccles, J. S. (2005). Parents, peers, and problem behavior: A longitudinal investigation of the impact of relationship perceptions and characteristics on the development of adolescent problem behavior. *Developmental Psychology*, 41(2), 401–413.
- Gonzalez-DeHass, A. R., Willems, P. P., & Holbein, M. F. D. (2005). Examining the relationship between parental involvement and student motivation. *Educational Psychology Review*, 17(2), 99–123.
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *Journal of Early Adolescence*, 13(1), 21–43.
- Goodenow, C., & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education*, 62(1), 60–71.
- Gray, M. R., & Steinberg, L. (1999). Unpacking authoritative parenting: Reassessing a multidimensional construct. *Journal of Marriage and the Family*, 61, 574–587.
- Gregory, A., & Weinstein, R. S. (2004). Connection and regulation at home and in school: Predicting growth in achievement for adolescents. *Journal of Adolescent Research*, 19(4), 405–427.
- Grolnick, W. S. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81(2), 143–154.
- Grotevant, H. D. (1998). Adolescent development in family context. In W. Damon & N. Eisenberg (Eds.), Handbook of child psychology: Social, emotional, and personality development (5th ed., Vol. 3, pp. 1097–1151). New York, Chichester, Weinheim, Brisbane, Singapore, Toronto: John Wiley & Sons, Inc.
- Herman, M. R., Dornbusch, S. M., Herron, M. C., & Herting, J. R. (1997). The influence of family regulation, connection, and psychological autonomy on six measures of adolescent functioning. *Journal of Adolescent Research*, 12(1), 34–67.
- Hidi, S., & Harackiewicz, H. M. (2000). Motivation the academically unmotivated: A critical issue for the 21st century. *Review of educational research*, 70(2), 151–179.

- Hill, N. E., Castellino, D. R., Lansford, J. E., Nowlin, P., Dodge, K. A., Bates, J. E., et al. (2004). Parent academic involvement as related to school behavior, achievement, and aspirations: Demographic variations across adolescence. *Child Development*, 75(5), 1491–1510.
- Kim, K., & Rohner, R. P. (2002). Parental warmth, control and involvement in schooling: Predicting academic achievement among Korean American adolescents. *Journal of Cross-Cultural Psychology*, 33(2), 127–140.
- Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 62(5), 1049–1065.
- Luyten, H., Bosker, R., Dekkers, H., & Derks, A. (2003). Dropout in the lower tracks of Dutch secondary education: Predictor variables and variation among schools. *School Effectiveness* and School Improvement, 14(4), 373–411.
- Majoribanks, K. (1993). Perceived parents' support for learning and aspirations for Australian adolescents. *Perceptual and Motor skills*, 77(3), 840–842.
- Marchant, G. J., Paulson, S. E., & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in the Schools*, 38(6), 505–519.
- Marks, G. N. (2006). Are between- and within-school differences in student performance largely due to socio-economic background? Evidence from 30 countries. *Educational Research*, 48(1), 21–40.
- Markussen, E., Sandberg, N., Lødding, B., & Frøseth, M.W. (2008). Bortvalg og kompetanse: Gjennomføring, bortvalg og kompetanseoppnåelse i videregående opplæring blant 9749 ungdommer som gikk ut av grunnskolen på Østlandet våren 2002. Hovedfunn, konklusjoner og implikasjoner fem år etter. Oslo: NIFU STEP.
- Morris, A. S., Steinberg, L., Sessa, F. M. S., Avenevoli, S., Silk, J. S., & Essex, M. J. (2002). Measuring children's perceptions of psychological control: Developmental and conceptual considerations. In B. K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents*. Washington, DC: American Psychological Association.
- Ng, F. F. -Y., Kenney-Benson, G. A., & Pomerantz, E. M. (2004). Children's achievement moderates the effects of mothers' use of control and autonomy support. *Child Development*, 75(3), 764–781.
- Norusis, M. J. (2002). SPSS 11.0 Guide to Data Analysis. New Jersey: Prentice Hall, Inc.
- Otis, N., Grouzet, F. M. E., & Pelletier, L. G. (2005). Latent motivational change in an academic setting: A 3 year longitudinal study. *Journal of Educational Psychology*, 97(2), 170–183.
- Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. British Journal of Medical Psychology, 52, 1–10.
- Paulson, S. E. (1994). Relations of parenting style and parental involvement with ninth-grade students' achievement. *Journal of Early Adolescence*, 14(2), 250–267.
- Pedersen, W. (1992). Foreldrerelasjoner målt med PBI, mental helse og atferdsavvik hos ungdom. Nordisk Psykologi, 44(4), 241–255.
- Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, 98(1), 209–218.
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and Emotion*, 28(2), 147–169.
- Roeser, R. W., & Eccles, J. S. (1998). Adolescents' perceptions of middle school: Relation to longitudinal changes in academic and psychological adjustment. *Journal of Research on Adolescence*, 8(1), 123–158.
- Rumberger, R. W., Ghatak, R., Poulos, G., Ritter, P. L., & Dornbusch, S. M. (1990). Family influences on dropout behavior in one California high school. Sociology of Education, 63(4), 283–300.
- Rumberger, R. W., & Thomas, S. L. (2000). The distribution of dropout and turnover rates among urban and suburban high schools. *Sociology of Education*, 73(1), 39–67.

- Ryan, R. M., & Grolnick, W. S. (1986). Orgins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of personality and social psychology*, 50(3), 550–558.
- Ryan, R. M., & Powelson, C. L. (1991). Autonomy and relatedness as fundamental to motivation and education. *The journal of experimental education*, 60(1), 49–66.
- Schneider, B., Csikszentmihalyi, M., & Knauth, S. (1995). Academic challenge, motivation and self-esteem: The daily experiences of students in high schools. In M. T. Hallinan (Ed.), *Restructuring schools: Promising practices and policies* (pp. 175–195). New York, NY: Plenum Press.
- Schunk, D. H. (1992). Theory and research on student perceptions in the classroom. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Silk, J. S., Morris, A. S., Kanaya, T., & Steinberg, L. (2003). Psychological control and autonomy granting: Opposite ends of a continuum or distinct constructs? *Journal of Research on Adolescence*, 13(1), 113–128.
- Slicker, E. K. (1998). Relationship of parenting style to behavioral adjustment in graduation high school seniors. *Journal of Youth and Adolescence*, 27(3), 345–372.
- Statistics Norway (2008). Facts about education in Norway 2008-key figures 2006. Retrieved 12.03.08, 2008, from http://www.ssb.no/english/subjects/04/02/facts/
- Steinberg, L. (1990). Interdependence in the family: Autonomy, conflict and harmony in the family relationship. In S. S. Feldman & G. R. Elliott (Eds.), At the threshold-the developing adolescent (pp. 255–277). Cambridge, Massachusetts, London: Harvard University Press.
- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, 11(1), 1–19.
- Steinberg, L., Darling, N. E., Fletcher, A. C., Brown, B. B., & Dornbusch, S. M. (1995). Authoritative parenting and adolescent adjustment: An ecological journey. In P. Moen, K. Lüscher, & G. H. Elder (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 423–466). Washington, DC: American Psychological Association.
- Steinberg, L., Lamborn, S. D., Dormbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, 63, 1266–1281.
- Steinberg, L., Mounts, N. S., Lamborn, S. D., & Dornbusch, S. M. (1991). Authoritative parenting and adolescent adjustment across varied ecological niches. *Journal of Research on*, *Adolescence*(1), 19–36.
- Trusty, J. (1998). Family influences on educational expectations of late adolescents. *Journal of Educational Research*, 91(5), 260–275.
- Wagstaff, M., Combs, L., & Jarvis, B. (2000). Solving high school attendance problems: A case study. *The Journal of At-Risk Issues*, 7(1), 21–30.
- Wichstrøm, L. (1993). Hvem sprang? Hvem sto igjen og hang? Ungdomsskoleelevers skolemotivasjon Oslo: Program for ungdomsforskning Norges forskningsråd.