Chapter 3
Social Capital in Schools

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The theory of social capital was first introduced by Hanifan in his rural school community study in 1916. Since then, the theory and research have focused more on family and neighborhood contexts and on adult outcomes. All forms of capital in schools–financial, human and social capital–are recognized predictors of children's and adolescents' well-being. Although evidence supporting the existence of a positive effect of school social capital on the well-being of the whole school community is accumulating, less is known about the associations between school social capital and students' health and health risk behaviors. Most research on school social capital has addressed its impact on academic achievement and social adjustment among young people, and consistent evidence has suggested that these are positively related. The research suggests that it is important to recognize children and adolescents as active agents who create their own social capital, and who themselves shape their communities and schools as contexts where social capital can be developed and maintained.

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I. Kawachi et al. (eds.), *Global Perspectives on Social Capital and Health*,
DOI 10.1007/978-1-4614-7464-7_3,

3.1 Introduction

The theory of social capital has, in fact, its roots in social research on schools. As early as 1916, Hanifan defined social capital in his study *The Rural School Community Center* as follows: "Social capital is good will, fellowship, mutual sympathy, and social intercourse among a group of individuals and families who make up a social unit, the rural community, whose logical center is the school" (p. 180). In his program, a rural community in West Virginia, USA, succeeded in building social capital and using it to promote the well-being of the whole community. The community passed through the three stages: from entertainment to discussion and finally to the stage of action. At that time, a major problem was children's truancy, which decreased remarkably during the program just through the teachers visiting and having discussions with the families.

Hanifan identified several means to improve social capital and community well-being, such as community center meetings, agricultural fairs and school exhibits, writing up the community history, addressing school attendance, evening classes for adults, lectures given by local people or teachers, establishing school libraries, improving school athletics, etc. His statement about the need to regard people as active agents is still fresh: "If you tell the people what they ought to do the will say 'mind your own business' but if you help them to discover for themselves what ought to be done, they will not be satisfied until it is done. The more the people do for themselves the larger will community social capital become and the greater will be the dividend upon the social investment" (Hanifan, 1916, p. 138).

Today, ill-health, in the forms of mental and behavioral disorders (Kessler, Avenevoli, Costello, et al., 2012; Merikangas et al., 2010; Patel, Flisher, Hetrick, & McGorry, 2007), and unhealthy lifestyles (Green et al., 2007; Ogden, Carroll, Curtin, Lamb, & Flegal, 2010; Zarzar et al., 2012) are highly prevalent in adolescents and young adults. Conduct disorders have increased during the past decades (Collishaw, Maughan, Goodman, & Pickles, 2004), and in addition, there is strong evidence that poor mental health in young people is associated with poorer educational achievement, substance use and abuse, violence, and sexual ill-health (Patel et al., 2007).

Associations between social capital and health have been widely examined among adults (for reviews, see Kim, Subramanian, & Kawachi, 2008; Murayama, Fujiwara, & Kawachi, 2012), but fewer studies to date have focused on social capital and health among children and adolescents. Schools are an important social context in young people's lives because young people spend a considerable amount of their time in schools. Since research has shown between-school variance in students' health-related outcomes (Elovainio et al., 2011; Richmond & Subramanian, 2009; Virtanen, Pietikäinen, et al., 2009), schools may influence adolescents' health and well-being. High level of education can also be seen as an endpoint of coevolution

of human capital with social capital. This is actualized in political and social engagement, such as active voting behavior (Helliwell & Putnam, 2007). In this chapter, we describe how social capital in the school setting is defined and how it is created between students, teachers, parents, and communities, as well as how it can be maintained and distributed. We also review the empirical evidence how social capital in schools may affect young people's health, well-being, and academic performance.

Besides families, neighborhoods are central settings for social development, being one of the places where children form networks and learn social skills (Sellström & Bremberg, 2006). While our main focus is on social capital in schools and its effects on the health and well-being of children, as will be revealed in the following review, forms of capital in the family, neighborhood, and school are tightly interconnected in the theory of social capital among young people. Thus, we will briefly present the concepts of family and neighborhood and the three forms of investments—financial, human, and social—in these contexts.

3.2 Social Capital in the Family and Neighborhood Contexts and Well-Being Among Children and Adolescents

Coleman (1988, 1990a), one of the most cited authors in the field, considered the family to be the most important entity in terms of social capital. More specifically, he observed that in addition to social capital, family systems are made up of financial capital (i.e., financial resources for household and child-rearing expenses) and human capital (i.e., parental education and labor skills). Coleman's definition (1988) of social capital is "not a single entity but a variety of different entities with two elements in common: they all consist of some aspects of social structures, and they facilitate certain actions of actors –whether persons or corporate actors–within the structure" (p. 98). Thus, in Coleman's view, social capital is a positive resource and a potentially important resource for the development of human capital.

Bourdieu (1986) meanwhile considers social capital as a mechanism of social reproduction, i.e., processes which sustain or perpetuate characteristics of a given social structure or tradition over a period of time. He uses social capital to emphasize class inequalities in access to institutional and other resources and inequalities in opportunities to develop and maintain human capital and cultural capital. A common point between Bourdieu's and Colemen's concepts is that social capital is a resource to be used to foster the cognitive and social development of children.

Social capital can be further considered in cognitive and structural terms (Bain & Hicks, 1998; Islam, Merlo, Kawachi, Lindström, & Gerdtham, 2006).

Cognitive social capital is an individual's perception of the level of interpersonal trust, sharing, and reciprocity. Structural social capital can be seen in externally observable factors such as the density of social networks or patterns of civic engagement. In children and adolescents, cognitive social capital often refers to their perceptions in contexts such as home, neighborhood, and school. Social capital can also be divided into vertical and horizontal components (Islam et al., 2006). Vertical social capital, i.e., linking social capital, stems from hierarchical or unequal relations due to power differences, differences in resource bases or status. Horizontal social capital includes bonding social capital (interpersonal relationships within homogenous groups, i.e., strong ties that link family members, friends, etc.) and bridging social capital [weaker ties linking different groups of people, and formal or informal social participation (Putnam, 2000)]. Parents' intrafamilial connections are a form of bonding social capital, whereas parents' connections with people outside the family, such as neighbors, school personnel, and coworkers, fall under bridging social capital (Parcel, Dufur, & Cornell Zito, 2010). Due to the main focus on ties between adults, in the works of the major contemporary theorists, children seem not to feature as core actors (Leonard, 2005). However, one may assume that among children and adolescents, bonding social capital refers to social capital in the family, while bridging social capital can be developed, for example, through their participation in various forms of informal and formal activities such as playgroups, sports groups, and after-school activities. Vertical (linking) social capital may among children and adolescents materialize in relationships with teachers, coaches, and employers.

There is a large body of research showing that deficits in familial financial capital, meaning low income, often pose a risk to children's healthy development (Kempf, Rathmann, & Herder, 2008; Lynch, Law, Brinkman, Chittleborough, & Sawyer, 2010) and that deficits tend to persist till midlife (Galobardes, Smith, & Lynch, 2006). Familial financial capital is correlated with high parental education, a foundation for human capital. Thus, human capital has been viewed as something which provides assets on which children can draw (Conger & Donnellan, 2007), and the relationship with school has been suggested to be easier for educated families because they tend integrate more easily with the school system and its expectations (Lareau, 2003; Maier, Ford, & Schneider, 2008).

According to Coleman (1990b), it is *communication* between family members that is important since it is through communication that basic rules and norms as well as obligations and responsibilities within the family are formed (Schaefer-McDaniel, 2004). Still, parents' "investment" in children is more than supervision or control; parents also create a bond along which information, norms, and values can pass (Dufur, Parcel, & McKune, 2008; Parcel & Dufur, 2001a). Social capital in the family, expressed as high levels of cohesion (Forkel & Silbereisen, 2001) and of parental surveillance and interaction with their children (Rothon, Goodwin, & Stansfeld, 2012), has been found to predict better mental health among children and adolescents. Coleman (1988) also suggests that social capital contributes to the development and

transfer of human capital from parents to children. The development of human capital may fail if parents are not involved in their children's lives and if their human capital is employed exclusively at work or elsewhere outside the home.

On the other hand, parent's bridging social capital, meaning their networks and activities that are outside the family but are related to their communities and neighborhoods, may have positive effects on child development (Parcel et al., 2010). Neighborhood social capital is high when the residents have feelings of mutual trust and connection, regularly exchange information and resources, support each other, and are willing to maintain the neighborhood, for example, by controlling the behavior of its residents. Coleman (1988) introduced the concept *intergenerational closure* in his theory to describe social ties linking people in a community: intergenerational closure is a densely knit network attained, for example, when parents know and interact with the parents of their children's friends. Intergenerational closure is also a control mechanism. Disadvantage in the neighborhood has been found to be associated with lower expectations for shared child control (Sampson, Morenhoff, & Earls, 1999).

Neighborhood social capital is often measured as the participation of children and adolescents in informal and formal activities such as playgroups, sports groups, after-school activities, and religious organizations. Along with learning of social skills, the children who take part may learn to express opinions of how to improve the living environment (Hart, 1992; Moore, 1999). However, there is a specific feature of children's and adolescents' participation in neighborhood activities, i.e., coerced, involuntary participation (e.g., due to parents' requirements), which should be treated as different from voluntary participation (Schaefer-McDaniel, 2004). However, the association between neighborhood social capital and child health may vary across different populations and countries (Drukker, Buka, Kaplan, McKenzie, & Van Os, 2005).

A disadvantaged neighborhood may become a "trap" for young people through dysfunctional relationships such as those seen in violent and criminal gangs (Leventhal & Brooks-Gunn, 2000; Sampson et al., 1999; Sampson, Raudenbush, & Earls, 1997). A safe and trustworthy neighborhood and a sense of belonging to the neighborhood seem to have positive effects on adolescent health (Boyce, Davies, Gallupe, & Shelley, 2008; Eriksson, Hochwälder, Carlsund, & Sellström, 2012; Eriksson, Hochwälder, & Sellström, 2011; Jain, Buka, Subramanian, & Molnar, 2010; Metlzer, Vostanis, Goodman, & Ford, 2007). Indeed, the idea of a "sense of belonging" to a place seems to be an important concept to incorporate in the theory of social capital in young people (Schaefer-McDaniel, 2004). Having a sense of belonging to a place has been shown to facilitate identity formation (Spencer & Woolley, 2000) and to be associated with better health in children and adolescents (Boyce et al., 2008; Eriksson et al., 2011, 2012; Meltzer et al., 2007). In summary, forms of capital have been largely considered and investigated within the context of family and neighborhoods, although as the following sections will reveal, the same concepts can widely be applied in school settings. To understand social capital, we first introduce what forms other types of capital take in schools.

3.3 Why Are Schools an Important Context for Understanding Social Capital?

3.3.1 Financial Capital and Human Capital in School

Financial capital forms a basis for effective school functioning. Schools with greater financial capital are likely to provide a better learning environment for students than do those with lower levels of financial capital. Smaller class sizes and lower numbers of students per teacher, i.e., smaller student–teacher ratio are examples of learning environment characteristics that are typically reflective of greater school financial resources. In the USA, small class sizes in the early grades (1–3) were shown to be associated with better cognitive capacity and academic achievement among the students, but the effects on health were mixed (Muennig, Johnson, & Wilde, 2011; Muennig & Woolf, 2007). A Finnish study took into account student characteristics (proportion of students with special educational needs) and found that the risk for teacher sick leave increased with the percentage of students with special educational needs, and this association was stronger in schools with a high student–teacher ratio (Ervasti et al., 2012). In other words, working with challenging students might be associated with poor well-being among teachers, especially when school resources are low. At least in the USA, private schools have smaller student–teacher ratios than do public schools (National Centre for Educational Statistics, 2010), and they are usually wealthier than public schools. Lefebvre, Merrigan, and Verstraete (2011) showed that attending a Canadian private school rather than public school increased students' mathematic achievement even when controlling for socioeconomic covariates. They suggested several possible mechanisms through which the achievement gap between private and public schools could be explained. These include peer effect, close monitoring of performance, strict discipline, higher academic workload, and better work environment for teachers' in private schools. However, in general the evidence on differences in student outcomes for private vs. public schools has been mixed (Lefebvre et al., 2011).

The discussion on the mechanisms explaining differences in student outcomes brings us to human capital at schools, which in this case refers to teacher qualifications. Students may draw on teachers' stores of human capital at school in a similar way as they draw on parents' human capital at home (Parcel et al., 2010). Although the measurement of teacher quality is difficult, educational researchers tend to agree that teacher attitudes can have a profound impact on students' achievement and educational growth. A study carried out in 84 Flemish secondary schools showed that in schools where teacher expectations were low, students perceived their teachers as less supportive and had higher rates of problem behavior and deviance (Demanet & Van Houtte, 2012). As suggested by Lefebvre et al. (2011), the lower prevalence of behavioral problems, higher than average student performance, and an environment that rewards achievements may attract better teachers to private schools or to schools with good reputations. Thus, although high human capital and high financial capital are likely to be clustered in the same schools, the review above shows that traditionally schools have tended to be viewed as a *reservoir* of financial

and human capital, which, in turn, affect student outcomes. In the forthcoming sections, we introduce theoretical concepts and empirical evidence on social capital in the modern school settings.

3.3.2 What Is Social Capital in School?

In their classic work, Coleman and his colleagues showed that students in Catholic schools had better academic performance and were less likely to drop out than those in public schools (Coleman, 1988; Coleman & Hoffer, 1987; Coleman, Hoffer, & Kilgore, 1982). They explained the better student outcomes as resulting from the functionality of Catholic communities with cohesive, supportive social systems. The Catholic communities were characterized by closeness of social structure, i.e., high social capital between students, families, schools, and communities. Cohesion of social interaction both in school and in the families specifically enhanced students' academic success. The study suggested that attendance at Catholic schools may promote social capital through intergenerational closure, meaning the interaction between parents whose children attend the same school. Coleman (1990b) identified six different types of bidirectional interpersonal relationships in the school setting where social capital can be developed: relationships among students, among teachers, among parents, between teachers and students, between teachers and parents, and between students and parents. In his view, positive outcomes such as good academic performance can be enhanced by increasing social capital at school. He sees parental involvement in school as particularly important in order to increase social capital, and this involvement is facilitated by high levels of intergenerational closure.

While Coleman suggests that family and school settings and their interrelations are the most important foundations of social capital, others' view is referred as *collective asset* at a broader community level (Putnam, 2000; Warren, Thompson, & Saegert, 2001): in a *trusting community*, residents know each other and are actively involved in each other's lives in a positive way which can have its positive effects on schools. Since this community social capital is often studied at the neighborhood level, we refer to it here as neighborhood social capital. High neighborhood social capital has been associated with lower dropout rates in high school students (Smith, Beaulieu, & Israel, 1992). When both family and neighborhood social capital was high, dropout rate was only 2.6 %, while in a situation where both were low, the corresponding rate was 47.7 %.

According to one of the more recent definitions, social capital at school refers to "the bonds between parents, children, and schools that support educational attainment and should have implications for social adjustment" (Parcel et al., 2010, p. 831). Parcel and coworkers' focus was on the investment in children and adolescents in the two important contexts in young people's lives, i.e., family and school. They believe that these investments, or lack thereof, play a major role in the differences in learning and social outcomes that further affect children's transfer into later adolescence. The leading idea was that instead of being separate activities, resources from families and schools can work together.

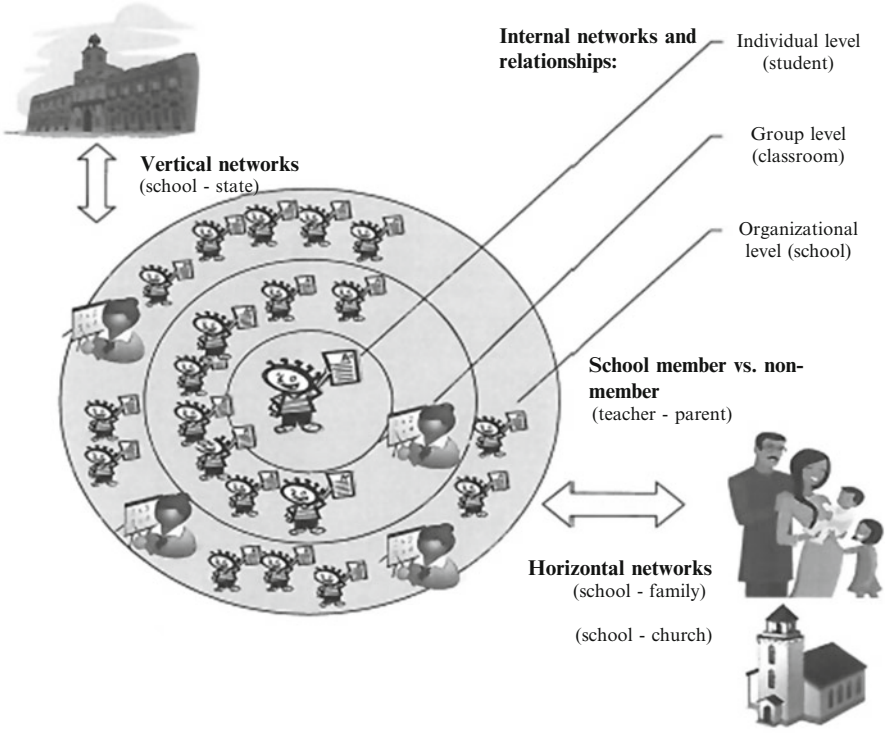

Fig. 3.1 School social networks (examples of possible networks in parentheses) (Modified from Tsang, 2010)

However, Tsang (2010) warns about confounding in the use of the term *social capital at school*; defining social capital as some aspects of social structures by their function may not be concrete enough. In addition, while Coleman's theory may be suitable, for example, for explaining student academic performance, regarding more complex concepts such as school-level efficacy, the theory may be limited (Cheng, 2005). Recently, a *social network theory of social capital* has been introduced in education and school settings (Lin, 2001). The theory defines social capital not as consisting of social networks, trust, and norms, but rather as the social resources rooted in social networks that can enhance the outcomes of actions. In that approach, the position of actors in a social structure, the nature of social ties between actors, and the location of social ties in the social networks will determine the possession of social capital. Thus, school social capital can also be defined as the social resources embedded in the internal and external social networks of a school. According to Tsang (2010), school social capital can develop from internal and external networks and from both of them, at three levels. Figure 3.1 illustrates these school social networks. Internal networks and relationships consist of individual-, group-, and organization-level relationships. External networks and relationships consist of vertical, horizontal, and member vs. nonmember relationships. Individuals can have

social ties within and between social groups and institutions. These connections will help develop social ties within and between social groups and institutions.

A variety of ways have been introduced to assess social capital among children and adolescents, but Morrow (1999) identified three forms of social capital that have relevance to children and young people in their everyday life contexts: (a) sense of belonging, (b) autonomy and control, and (c) social networking. Indeed, *feeling connected to school* has emerged as a important indicator of social capital, potentially even more so than, for example, structural factors such as school type, class size, or teacher training (Kidger, Araya, Donovan, & Gunnell, 2012). The factors that seem to foster school connectedness are fair treatment of students, the emotional closeness of students to each other, and student participation in common affairs at school (Blum & Rinehart, 2001).

The existing research suggests that all forms of capital at home, in the neighborhood, and in school settings may relate to each other and that they each contribute to child well-being. Also, these contributions may be additive (Eriksson et al., 2011; Sanderfur, Meier, & Campbell, 2006). Parcel and Dufur (2001a) call them *resource boosters*; children who usually are privileged in one context (e.g., family financial capital) are also favored in other spheres (e.g., family human capital, school social capital). This effect is suggested to be one of the mechanisms that increase social inequalities in young people's well-being and academic achievement. However, a *compensation effect* is also possible; that is, favorable conditions in one context (e.g., school) may offset unfavorable conditions in another context (e.g., family). Social capital at school can also be transformed into other forms of capital (Tsang, 2010). Some studies have found evidence of compensation effects, for example, a study by Hoffman and Dufur (2008) suggested that high-quality schools may substitute for poor parental attachment and low parental involvement in school. However, financial capital at home may be an almost irreplaceable basis of other forms of social capital; in one study, reduction of financial capital led to deterioration of social capital at home and at school (Vandewater & Landford, 2005).

3.4 School Social Capital and Student Outcomes: The Evidence

In this section, we present research evidence on the association between social capital in schools and student outcomes. The longest research tradition is social capital as a predictor of students' academic achievement and social adjustment. Recently, other outcomes, such as health and health risk behaviors, have received more attention.

3.4.1 Academic Achievement and Social Adjustment

The most researched outcomes regarding the topic of social capital at school are academic achievement and social adjustment, the latter usually measured by the level of behavior problems, delinquency, and substance use. Indeed, some scholars

suggest that elements of social capital, such as social ties, social control, collective efficacy, and mutual trust, can even form the basis of major criminological theories (Kubrin & Weitzer, 2003). However, it is still debatable to what extent schools have independent effect on young people's health and well-being or whether the outcomes are mainly due to family characteristics (Dufur et al., 2008).

Both *internal* and *external* social capital has been associated with better academic achievement among students (Tsang, 2010). Social capital (Haghighat, 2005) and feeling connected to school (Edwards & Mullis, 2001) have been associated with better academic achievement, whereas lack of such feeling is related to higher prevalence of violent behavior at school (Edwards & Mullis, 2001). However, not all studies have shown an association between social capital at school and students' academic achievement (Domina, 2005). A specific form of social capital, social support from various sources (parents, teachers, friends), has been found to be associated with protection against depression (Colarossi & Eccles, 2003) and against school-related burnout (Salmela-Aro, Kiuru, Pietikäinen, & Jokela, 2008) among adolescents. Still, the relationships may be more complex than previously thought: a study of Brazilian youth found that characteristics of the network (e.g., whether the closest friends are from school or church) may determine the risk of unhealthy lifestyle habits (Zarzar et al., 2012).

In many studies, efforts have been made to simultaneously assess the contribution of different forms of capital in different settings in relation to various outcomes in young people. Different forms of family capital, for example, have been found to be persistent and important for academic achievement among children, and evidence consistent with both boosting effects and compensation effects has been reported (Crosnoe, 2004; Dufur & Troutman, 2005; Huang, 2009; Kim & Schneider, 2005; Parcel & Dufur, 2001a, 2009). Several types of low capital have also been related to behavioral problems among children (Dufur et al., 2008; Hoglund & Leadbeater, 2004; Parcel & Dufur, 2001b; Rodgers & Rose, 2002), with family forms of capital usually showing stronger effects than forms of school capital. In addition, higher social capital either at home, at school, or both have been found to be associated with better academic achievement (Huang, 2009), lower rates of delinquency (Chung, Hill, Hawkins, Gilchrist, & Nagin, 2002; Dornbusch, Erickson, Laird, & Wong, 2001; Meadows, 2007; Salmi & Kivivuori, 2006; Schwartz et al., 2009; Wright & Fitzpatrick, 2006), lower rates of handgun carrying (Luster & Oh, 2001), and lower rates of risky behaviors (Booth, Farrell, & Varano, 2008). In one study, family financial capital and both school and neighborhood social capital were associated with higher levels of civic engagement in adolescents from five European countries (Lenzi et al., 2012).

3.4.2 Health and Health Risk Behaviors

The strongest evidence across all health-related outcomes has been found for family and school sense of belonging and for being involved in neighborhood activities (Morgan & Haglund, 2009). The research on school social capital is scarce and the

results are less consistent. However, adolescent smoking has been linked to various relevant correlates for social capital at school: school nonsmoking policies (Pinilla, Gonzáles, Barber, & Santana, 2002), teachers as role models for smoking (Poulsen et al., 2002; Virtanen, Pietikäinen, et al., 2009), peer group behavior (Turner, West, Gordon, Young, & Sweeting, 2006), and teacher–student relationships and school's focus on caring and inclusiveness (Henderson, Ecob, Wight, & Abraham, 2008). Other studies show student-reported cognitive social capital to be associated with smoking (Takakura, 2011) and *school culture* to be associated with adolescent substance use: schools providing appropriate support and control for students had a reduced risk for student use of alcohol and illicit drugs (Bisset, Markham, & Aveyard, 2007). Student-reported social capital as measured by perceived trustworthiness and helpfulness of others at school was also associated with reduced risk for suicide attempt, especially among girls (Langille, Asbridge, Kisely, & Rasic, 2011). However, Takakura (2011) studied the effects of contextually measured social capital at school on students' smoking and alcohol use and found no association. Table 3.1 summarizes studies on the associations between school social capital and students' health indicators.

Because most studies rely on students' self-perceptions of both the school characteristics and the measured outcomes, a methodological problem arises; individual-related factors (e.g., response style, negative affectivity) may artificially inflate the associations. Indeed, a recent systematic review (Kidger et al., 2012) summarized prospective studies where "objective" indicators of social capital were measured at the school level and found no clear evidence of its beneficial effects on mental health among students. In the same review, students' individual perceptions of high social capital at school, especially perceived support from teachers and student's own connectedness to school, did associate with better mental health outcomes.

Furthermore, it is possible that the level of well-being among young people depends on the quality of relationships *between adults* in the community (Putnam, 2000). This proposal leads to a hypothesis that the quality of relationships between adults at school may also be important in relation to well-being among young people. This question was addressed in large-scale studies of over 24,000 students in 136 Finnish secondary schools (Elovainio et al., 2011; Virtanen, Kivimäki, et al., 2009). In these multilevel studies, the perceptions of school staff of their working environment were aggregated at school level and linked to individual students' perceptions of their well-being, school environment, health and behavioral outcomes, and academic achievement. Because the measures of exposure and outcome came from two independent samples, the studies avoided the problem of common method bias. In these studies, *vertical* social capital at school was indicated by supervisors' ability to suppress personal biases, to treat subordinates with kindness and consideration, and to take steps to deal with subordinates in a truthful manner, i.e., relational justice (Moorman, 1991). The study by Elovainio et al. (2011) showed that when teachers perceived their schools as having low relational justice, their students had a higher risk for poor academic performance, truancy, and for reporting more psychosomatic and depressive symptoms. In a similar vein, *horizontal* social capital at the workplace was indicated by team climate, especially its component of trust and

Table 3.1 A sample of studies on school social capital and adolescent health indicators

Indicator of school social capital (predictor)	Indicator of adolescent health/health behavior (outcome)	Author(s)	Study design
Social support (from parents, teachers, friends)	Less depression	Colarossi and Eccles (2003)	Longitudinal
Social support (from parents, teachers, friends)	Less school-related burnout	Salmela-Aro et al. (2008)	Cross-sectional
Social support (from parents and teachers)	Lower rates of delinquency (in males), less depression (in females)	Meadows (2007)	Longitudinal
Classroom concentrations of pro-social behaviors	Less behavior problems	Hoglund and Leadbeater (2004)	Longitudinal
School attachment (fair rules at school, school satisfaction)	Less health risk behaviors, less depressive symptoms	Rodgers and Rose (2002)	Cross-sectional
School attachment (fair rules at school, school satisfaction)	Lower rates of delinquency, less smoking	Dornbusch et al. (2001)	Longitudinal
School attachment (fair rules at school, school satisfaction)	Lower rates of delinquency	Wright and Fitzpatrick (2006)	Cross-sectional
Parent–child relationships			
Parental support, teacher control, interpersonal trust	Lower rates of delinquency	Salmi and Kivivuori (2006)	Cross-sectional
School climate (respect, peer relationships, intervening, school order)	Less health risk behaviors (e.g., smoking, drinking), less serious delinquency (fighting, gun carrying)	Booth et al. (2008)	Cross-sectional
Democratic school climate	Higher levels of civic engagement in the community	Lenzi et al.(2012)	Cross-sectional
School sense of belonging	Better self-rated health, less depressive symptoms, less health risk behaviors	Morgan and Haglund (2009)	Cross-sectional
School nonsmoking policies	Less smoking	Pinilla et al. (2002)	Cross-sectional
Teachers as role models for nonsmoking	Less smoking	Virtanen, Pietikäinen, et al. (2009)	Cross-sectional, data from independent sources

(continued)

Table 3.1 (continued)

Indicator of school social capital (predictor)	Indicator of adolescent health/health behavior (outcome)	Author(s)	Study design
Teacher–student relationships at school, school focus on caring and inclusiveness	Less smoking	Henderson et al. (2008)	Longitudinal, data from independent sources
Individual cognitive social capital (trust)	Less smoking and drinking	Takakura (2011)	Cross-sectional
Contextual level social capital (aggregated school-level trust)	Inconclusive evidence on smoking		
School culture (support and control for students)	Reduced risk of alcohol and illicit drug use	Bisset et al. (2007)	Cross-sectional
Perceived trustworthiness and helpfulness of others at school	Reduced risk of suicide attempt, especially among girls	Langille et al. (2011)	Cross-sectional
Parental involvement in advising the school, participating in program design, participating in policy decisions, and volunteering in after-school programs (administrator responses)	Social adjustment (less behavior problems)	Dufur et al. (2008)	Cross-sectional, data from independent sources
Teacher perceptions of supervisor justice (relational justice), i.e., vertical social capital (teacher responses)	Less psychosomatic and depressive symptoms	Elovainio et al. (2011)	Cross-sectional, data from independent sources
Teacher perceptions of team climate, i.e., horizontal social capital (teacher responses)	Less physical and psychological symptoms	Virtanen, Kivimäki, et al. (2009)	Cross-sectional, data from independent sources

opportunity for participation (Kivimäki & Elovainio, 1999). The study by Virtanen, Kivimäki, and colleagues (2009) showed that poor trust and opportunities for participation among the school staff were associated with students' opinions of not being heard at school, high truancy, and physical and psychological symptoms.

3.4.3 Effects of School Social Capital on Teachers

High social capital at schools has been linked to school efficacy, which has been defined, for example, as the achievement of stated goals, as the healthy internal processes and smooth operation that determine the quality of output and the degree

to which the stated goals can be achieved, or as a set of elements in the input, process, and output of schools that provide services in order to satisfy the needs and expectations of all stakeholders (Tsang, 2010). Both internal and external social capital have been associated with better teaching efficacy among teachers (Tsang, 2010). Thus, social capital at school may have a positive effect on teachers' well-being as well. In one study, student problem behaviors, namely, vandalism and bullying at school, and low levels of school satisfaction were used as indicators of low social capital at school. These variables were aggregated at school level in 90 Finnish secondary schools, and the results showed that high rates of vandalism and bullying behavior were associated with lower well-being among teachers, as indicated by taking of sick leaves (Ervasti et al., 2012a). Moreover, low student school satisfaction was associated with an increased risk of teachers' long-term sick leaves, especially due to mental disorders (Ervasti et al., 2012b). It is however likely that the association is bidirectional; low levels of social capital increase teacher ill-health, and teacher ill-health (frequent sick leaves) further deteriorates social capital at school. Finally, such schools may get poor reputations and thus become unattractive to the most effective teachers with the most human capital.

3.5 How Can Social Capital Among Young People Be Generated and Maintained?

The above reviewed studies present a rather clear picture on the association between social capital at school and student outcomes. However, less is known about how social capital among young people can be generated and maintained. Are there actually "separate" social capitals among young people and the adults around them? Leonard (2005) argues that children and adolescents are actually neglected in the theories and empirical research on social capital. They are often seen as passive respondents who internalize or reject the norms and sanctions imposed by influential adults such as parents and teachers. Social capital in young people is seen more like a "by-product" of parental social capital or as a parental asset that children can draw on. This is visible, e.g., in Coleman's (1988) concept of intergenerational closure.

Children and adolescents may benefit from social capital through an increase in their own social networks and resources. They can generate their social capital in family, neighborhood, and school settings; about half of their waking time is spent at school. Communities and neighborhoods high in social capital are characterized by, for example, young people's active participation in informal and formal playgroups, sports groups, and other leisure activities. Offer and Schneider (2007) studied network building among 500 working families and found that children—instead of being just the outcome of parents' investments—are active social motivators of network building and of the creation of social capital in families. Their viewpoint is that because adolescents are active in the local community (as opposed to modern middle-class parents whose long working and commuting hours limit such activity),

they can act as "social brokers" for their parents and connect them to other adults in the community. Leonard (2005) found paid employment such as delivering flyers or babysitting to be a form of generation of social capital in young people which has received little attention. However, young people are more dependent on the quality of the local environment than other age groups, except the elderly. Thus, areas characterized by poverty and deprivation are likely to be seen as unattractive sites for leisure and to prevent social connections between the residents. Leonard (2005) found in her studies that the majority of children and adolescents living in disadvantaged neighborhoods said that the major problem was the lack of amenities in their locality, such as playgrounds or other play areas. This may make watching television at home the most attractive leisure activity or keep young people solely in the web-based social networks. This highlights a certain level of community financial capital as a prerequisite for the development of young people's social capital in communities. In line with Bourdieu's (1986) view, social capital becomes effective when it is reinforced with other forms of capital.

Schools are at the core of communities and may even be indistinguishable from the surrounding community. Schools should therefore be involved in all attempts to improve social capital in communities. Ways to promote child and adolescent well-being through increasing social capital include the following: supporting positive parenting skills and activities that build parental social capital; building safe and comfortable neighborhoods where networks of communication, trust, and assistance can be evolved; enhancing children's and adolescents' sense of belonging, autonomy, and control; and enhancing social networking in each context. Hanifan (1916) argues that "First, there must be an accumulation of community social capital. This can be done by gathering together upon occasions for entertainment. Then, by skillful leadership this social capital can be easily directed towards improvement of community well-being" (p. 131).

According to Tsang (2010), the key to maintaining school social capital is school social networks with expressive action. As a basis for this, there is the school administrations' recognition of trust, norms, and values within and between school social networks (Driscoll & Kerchner, 1999). School social capital cannot be maintained unless values and norms are commonly shared by actors, and this may be a challenge as schools tend to have different social groups and networks with possibly conflicting norms and values. Following Hanifan's stages of building of social capital, at the entertainment stage, *cultural interventions* have been suggested to have potential in attempts to develop increased school social capital (Cavanaghi & Dellar, 1997). Instrumental actions are also essential in order to create and maintain social capital at school (Tsang, 2010). One of these, *outreach strategy*, means, for example, contacting parents to participate in voluntary activities at school (Haghighat, 2005). Another instrumental action is institutionalizing external school networks, such as setting up site-based management councils (Driscoll & Kerchner, 1999). What should not be forgotten is the students' participation and "voice" (Virtanen, Kivimäki, et al., 2009); because as Hanifan (1916) suggested, "the more the people do for themselves the larger will community social capital become" (p. 138). In this way, children and adolescents can have an opportunity to create their social capital themselves.

Indeed, a review of four intervention studies concluded that changes to the school social environment that increase participation, improve relationships, and promote a positive school ethos may be associated with reduced drug use among young people (Fletcher, Bonell, & Hargreaves, 2008).

3.6 Concluding Remarks

Higher levels of social capital in many contexts, including in schools, is associated with better health, greater well-being, and higher academic achievement in young people. In addition, the contribution of social capital may be additive (boosting other forms of capital in other settings). Different forms of capital in different settings may also compensate for the lack of any one type of capital. High social capital seems to be beneficial to the whole school community, including teachers.

However, as many studies have been cross-sectional, there still are significant methodological challenges, such as proving the direction of causality. More research is needed to increase understanding of the mechanisms that connect social capital to health and well-being in young people. These have been suggested to be linked with strengthened social networks and increased trust and a sense of belonging to one's community which, in turn, improve the quality of life and reduce stress. Other mechanisms are the promotion of health information, adopted healthy norms or behaviors, social control over unhealthy behavior, and increased access to local services and amenities (Kawachi & Berkman, 2000; Kawachi, Kennedy, & Wilkinson, 1999). Exploring the causal pathways through which capital in one context may affect capital in another and their association with young people's health and well-being is also of importance (Parcel et al., 2010).

It is also necessary to recognize school as a separate entity from the community albeit it is at the core of it; the advantage of this approach is that schools are more clearly defined than are neighborhoods, and such an institutional context provides an opportunity to test specific interventions and to link any outcomes to a well-defined setting. As we demonstrated in our review, education, learning, and health are linked to each other, which means there is the potential for positive spillover when the focus is on schools. Finally, it is highly important to increase our understanding of how children and adolescents create their social capital and how they themselves shape the community around them.

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